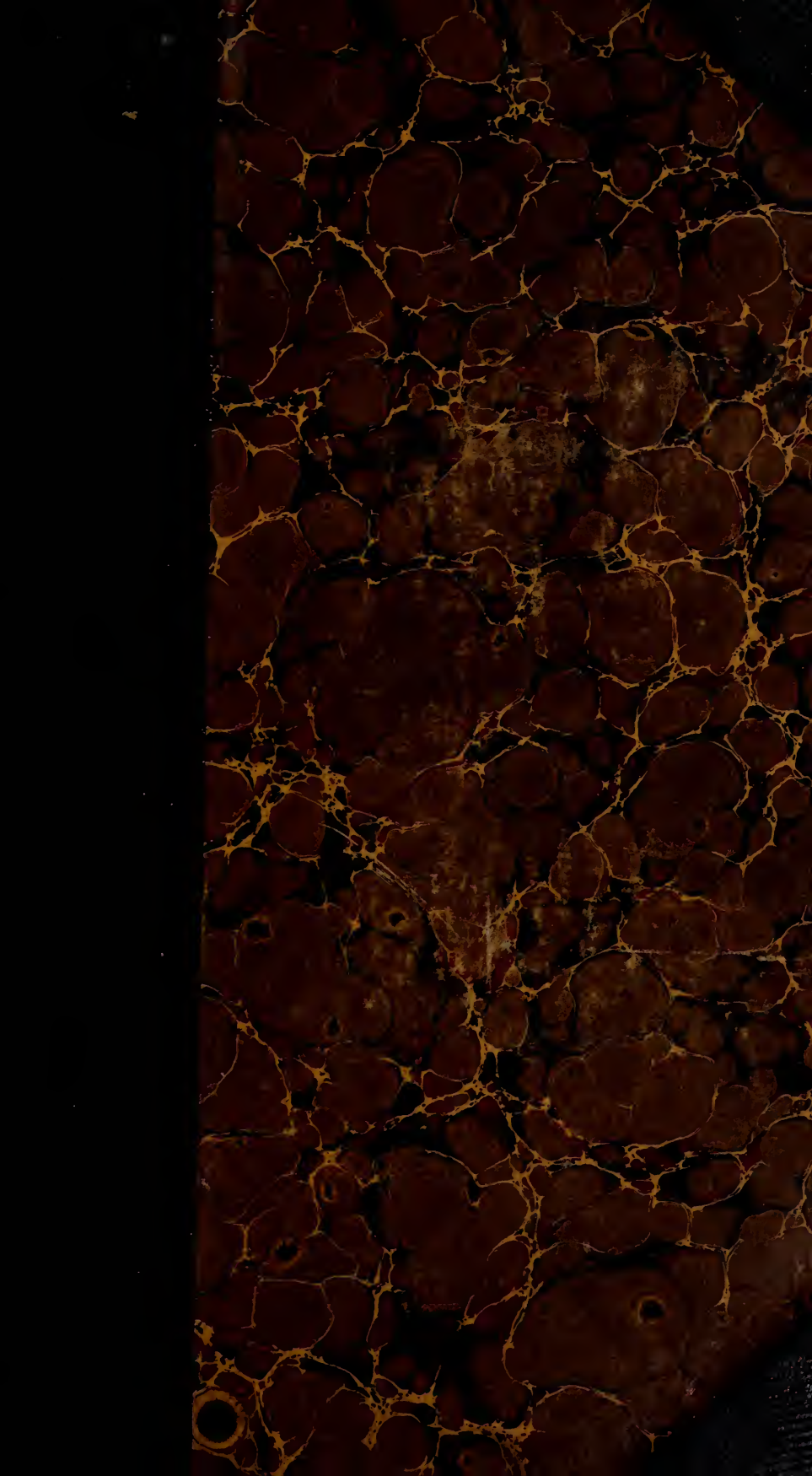




71570



Class _____ *No* _____

Presented by

J. J. Taylor, M.D.

2⁹⁹



32

BUFFALO MEDICAL JOURNAL

Established 1845 by AUSTIN FLINT M. D.

EDITOR:

WILLIAM WARREN POTTER, M. D.

ASSISTANT EDITORS:

WILLIAM C. KRAUSS, M. D.

NELSON W. WILSON, M. D.

ASSOCIATE EDITORS:

JAMES WRIGHT PUTNAM, M. D.

ERNEST WENDE, M. D.

JOHN PARMENTER, M. D.

JOHN A. MILLER, Ph. D.

HARVEY R. GAYLORD, M. D.

MAUD J. FRYE, M. D.

JOHN A. RAFTER, M. D.

VOL. LXII.

August 1906 to July 1907.



BUFFALO.

1907.

OFFICE OF THE
DIRECTOR OF THE
BUREAU OF THE
CENSUS

UNITED STATES DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON, D. C.

Contributors to Vol. LXII.

AUGUST, 1906—JULY, 1907.

BEAHAN, ALBERT L.....	Canandaigua
BIRCHMORE, WOODBRIDGE HALL.....	Brooklyn
BOSWELL, CHARLES O.....	Rochester
BROWN, C. W. M.....	Elmira
BROWN, WILLIAM M.....	Rochester
BRUSH, EDWARD N.....	Baltimore
BURNHAM, M. P.....	Raybrook
CANNADAY, JOHN EGARTON.....	Hansford, W. Va
CLINTON, MARSHALL.....	Buffalo
COOK, ROBERT G.....	Rochester
DIXON, SAMUEL C.....	Harrisburg
FRAZIER, CHARLES H.....	Philadelphia
FRONCZAK, FRANCIS E.....	Buffalo
FRYE, MAUD J.....	Buffalo
GARDNER, JAMES A.....	Buffalo
GREENE, DEWITT C.....	Buffalo
GREGG, MILTON E.....	Elbridge, N. Y
GOLDBERG, SIGMUND.....	Buffalo
GOULD, GEORGE M.....	Philadelphia
HAYD, HERMAN E.....	Buffalo
HUBBELL, ALVIN A.....	Buffalo
JACOBSON, NATHAN.....	Syracuse
JAMESON, THOMAS.....	Rochester
JENKINS, J. F. T.....	Los Angeles
JOHNSON, WILLIAM D.....	Batavia
KING, JAMES E.....	Buffalo
KRAUSS, WILLIAM C.....	Buffalo
LANGDON, H. H.....	New York
LEBRETON, PRESCOTT.....	Buffalo

AUG 10 1908

71570

LIST OF CONTRIBUTORS.

LEVY, I. H.....	Syracuse
LEWIS, DENSLOW.....	Chicago
LEWIS, F. PARK.....	Buffalo
LOW, FRANK W.....	Buffalo
LUCID, M. M.....	Cortland
McKEE, E. S.....	Cincinnati
MACPHERSON, J. D.....	Akron
MARCHAND, CHARLES.....	New York
MORSE, JOHN LOVETT.....	Boston
NORTON, J. PEASE.....	New Haven
PARK, ROSWELL.....	Buffalo
PILCHER, JAMES EVELYN.....	Carlisle
PUTNAM, JAMES WRIGHT.....	Buffalo
ROOKER, A. M.....	Buffalo
ROSE, L. W.....	Rochester
SMITH, EUGENE A.....	Buffalo
SMITH, HERBERT E.....	New Haven
STOVER, CHARLES.....	Amsterdam
THOMA, FRIDOLIN.....	Buffalo
TOTMAN, DAVID M.....	Syracuse
VANDER VEER, ALBERT.....	Albany
WALLACE, W. L.....	Syracuse
WARBRICK, JAMES C.....	Chicago
WILDER, BURT G.....	Ithaca
WILLIAMS, HENRY T.....	Rochester
WILSON, NELSON W.....	Buffalo
WRIGHT, ADAM H.....	Toronto
YOUNG, J. C.....	Cuba, N. Y

Medical Association of Central New York

Medical Society of the County of Erie

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

AUGUST, 1906.

No. 1

ORIGINAL COMMUNICATIONS.

Address to the Graduates in Medicine, Law, Dentistry and Pharmacy, at the Sixtieth Annual Com- mencement of the University of Buf- falo, N. Y., June 1, 1906.

By EDWARD N. BRUSH, M. D.

Physician-in-Chief and Superintendent, Sheppard and Enoch Pratt Hospital,
Towson, Md., Professor of Psychiatry, College of Physicians
and Surgeons, Baltimore, Md.

MR. VICE-CHANCELLOR, Members of the Faculties of Medicine, Law, Dentistry and Pharmacy, Members of the Graduating Classes, Ladies and Gentlemen:

I MAY not be, indeed I know that to some of you I am not, revealing a secret when I say that I am not here this morning as the one first chosen to address you. I can but feel flattered that I came second to him who was your first choice, and I most deeply regret with you, that he was prevented by the pressure of public affairs from standing in my place. I fear, moreover, that before I reach the conclusion of what I have to say my audience will wish that the choice had passed on to the next man on your list of possible speakers.

When, however, the Dean of the Medical Department of your University asked me, in behalf of himself and his fellow Deans of the departments of Law, Dentistry and Pharmacy, to address you this morning, while I knew that the preparation of an address would, in the midst of a particularly active period of professional work, be an added burden; and appreciated also my lack of ability for the task, it was not difficult to yield assent. The opportunity to return to one's Alma Mater after more than a quarter of a century's absence from her fostering care, to the city of my boyhood and young manhood, to the scenes of my professional studies and early professional work, to say some words of God-speed, and possibly some of admonition and advice, gathered from varied experiences and observations in many places, and among many men, to those just entering upon professional

careers, presented attractions which it was difficult, and indeed, as you see, impossible to resist.

I am, I am told, expected to give the final address to four classes of students who have completed the prescribed course of professional study, and who today receive the diploma of this University, which marks the successful completion of their University studies, and entitles them to admission to the ranks of the profession they have chosen.

Medicine, Law, Dentistry, Pharmacy! It would be interesting, were it possible, and no doubt in some degree profitable, to know what were the incentives which led you to choose a professional career, and of more peculiar interest, could we learn, what it was that led to the particular choice which each one of you has made. We are told of a certain state in life that it "is not by any to be entered into unadvisedly or lightly; but reverently, discreetly, advisedly, soberly and in the fear of God," and in the same manner, let us hope, you have entered upon that profession which will in all probability be your life work, in which it will be for you to make or mar your career; to add to the sum of human knowledge, and happiness, to contribute to the common weal; or to pass through life, touch elbows with your fellow men and women, and leave no mark behind which shall be a record that you have lived and worked among them.

Several years ago I heard a well known college president address a class of young men about to leave their Alma Mater. His address was replete with most valuable advice and admonition delivered in an eloquent and impressive manner. One thing, which he said in closing, made a lasting impression upon me, it was something like this, I regret that I cannot quote his words *verbatim*: "Some of you will, I fear, think that opportunity awaits the man, and will wait for opportunity. Some of you will grasp the skirts of happy chance, some will breast the blows of circumstance. Some of you will make chance and circumstance subservient to your determination to do the work before you in all honesty and loyalty to yourselves and your fellowmen. Some of you will make your mark in the world, some of you will never be heard of again." What portion of this applies to the members of the classes leaving this University today? If you have entered upon your life work "discreetly, advisedly, soberly, and in the fear of God" the more cheerful part you may take to yourselves. If you have sought a professional career because you considered it a calling somewhat more dignified and genteel than trade or manufacturing, or because you thought you saw in it a way to position, influence and a comfortable means of gaining a living; if, I say, no higher motive, no love for the calling you have

chosen, no desire to add by your work to your own knowledge, and the accumulating wisdom of the age, to use your calling not alone as a means to elevate yourself, but to elevate and benefit your community and your profession, then you are bound to fail, no matter how much in the eyes of the world you may seem to succeed.

You have heard much in this particular locality of a "message to Garcia," and of the man who carried it and of the lessons to be drawn from the incident. There are men and women every day, and every hour of every day, who are carrying the message delivered to them with equal zeal and faithfulness. The examples and the lessons are all about you, and he who runs may read them. Your course here has trained you to carry a message, to do a particular work, and by virtue of that training you will be expected to accomplish your mission without thought of the difficulties, without being diverted from the path by dangers, real or imaginary, or by temptations to days of pleasure and nights of ease, no matter how luring.

Training will give you the ability, zeal for your profession, the strength. It was training which sent the sailor on the *Maine* through dark passageways already partially flooded with water, to his Captain, to calmly salute in proper form and report "the ship is sinking, Sir!" It was training which caused the young sailor, a short time ago, on the *Kearsarge* to rush through the flames of burning powder and shut himself in the magazine, and save the ship—it was training which sent the nurse the other day in California across floors which were being shaken as by the hand of some mighty giant, to calmly sit down by my friend's bedside, and count his pulse. None of these men thought of self or safety; their duty, instilled by training, was the first thing which appeared before them in the hour of peril, and calmly, efficiently they went about it. Your training here has taught you how to perform your duty, how to carry your message, but constant study, accumulated experience will be necessary to permit you to carry such a message and to so deliver it, as shall lift you above the common average of men and women in your calling, and permit you to make your mark in the world.

In an article written five or six years ago, upon the opportunities of the opening century, by a United States Senator, the writer quotes from the pessimistic talk of a young college graduate as follows:

"The great principles of the law have all been announced and applied to every conceivable form of human rights and controversy. * * * In invention there may be some improvements on old and present inventions, but there will be no more Edisons, no more

Teslas. In medicine we are about on the top of the mountain. In literature the creative and fundamental things have all been done. From now on books will be mere second-hand talk. In statesmanship nothing is left except that common house-keeping which we call administrative government."

The senator goes on to say that this young man's melancholy view is that which he has found crushing the enthusiasm out of most college students he has met. If the senator himself has not formed a perverted opinion of the ideas of the college students he has met, then I believe he has been singularly unfortunate in meeting his men. The college men I have known have not as a class, nor in any large number, held such views. I know, as you know, as you have probably experienced among your associates, if not in your own career, that there comes a time to many young men when a certain pessimism seems a good thing to hold and talk.

The young graduate is sometimes led to talk of the good old days and bewail the decadence of manners and morals, and the lack of opportunity of the present. Most men get well over this by the time they have entered upon the real work of life, but some remain purblind, and go about all their days unconscious of the opportunities all about them, bemoaning the past, bewailing the present.

If there be any among you who are inclined to the belief that their lives have fallen on evil times I commend to them the wise words of a Roman philosopher who wrote in the first century of the Christian era. "We must guard" he says "against letting blame fall on our own age. This has always been the complaint of our ancestors, that manners have been corrupted, that vice reigns, that human life is deteriorating and falling into every kind of wickedness. We lament in the same strain and our descendants will do the same after us."

There may be some who rail at the times, who see no good in the present, no hope in the future, but I feel that you will agree with me in the assertion that there never has been an age in the history of the world, when, to virile and healthy manhood, life was more pure, cleanly, and hopeful than now in the Twentieth Century and here in the United States. In laboratories and in hospital wards all over the land men are seeking the cause and the prevention of disease; and seeking not for personal gain, but freely giving what they find to the common stock of human knowledge, to the general good of the race. When, in the history of the good old times, were men to be found like those soldiers of the United States Hospital Corps told of by the late Major Reed who calmly volunteered to submit to the experiment of being bitten by mosquitoes carrying the yellow fever germ. Offered

extra compensation, they declined it, saying "we are not risking our lives for money; if there is anything to be gained by the experiment which shall benefit mankind and control the plague, we are willing to do our part." The experiment on these men went far toward solving the problem, but had it failed, such an exhibition of the best to be found in men is of itself a most valuable asset.

Say to scoffers and pessimists, look about you, open your eyes and unstop your ears, and above all read your histories. Cultivate your sense of proportion, the possession of which, is, after all, that which distinguishes the men of calm, strong, capable minds from those who, though vociferous and noisy, really make no impression on the age and are often a drag and hindrance. It is in fact this sense of proportion, this ability to compare experiences calmly and judiciously which is the one thing which distinguishes the sane mind from all forms of pathological mental variation. Insanity indeed, might be called in brief, a disturbance of the comparative faculty. By force of habit, in deference to custom handed down to us from those older times, the gentle sex still leaves the table when the coffee is served, but not, by any means, for the same reason as in the good old days, when the habitual drunkenness and the foul talk at the close of all formal dinners, made it necessary for them to depart. No, we are cleaner both in our lives and our speech.

In those days one-half the world knew little and cared less how the other half lived. Never in the history of time has the fortunate man paid such prompt and generous heed to the call and the needs of his unfortunate brother. What a striking and inspiring example we had of this, but a few days ago, when the cry of distress came across the continent from far away San Francisco. John Howard, a hundred years ago, was a phenomenon. His noble life and philanthropic work would, today, be matched by thousands. Corruption, you say, stalks in public places and leaves its smirch on our politics and on our financial transactions, but what of the days of Walpole or Churchill or Digby, what of the South Sea Island Bubble? "Say not thou, what is the cause that the former days are better than these? for thou dost not inquire wisely concerning this."

But let us return to the statement of the young college student, which seemed to so impress the senatorial writer I have quoted.

Has law no principles to establish? Do decision and precedent cover all matters of human controversy or human right? Have the theologians come to fixed and unchangeable opinions as to man's relations to his Maker and his responsibility both as his own and his brother's keeper? Can they always decide in

questions of morals, as to the springs or sources of moral sense and steer 'twixt that which on the one hand is moral obliquity, on the other, moral defect? Has invention reached its limit, and are statesmen, having no new principles to urge, to satisfy themselves with the spoils of party victory, the gains of practical politics, and the "common house-keeping" of administrative government? Have the science and art of medicine approached the zenith of their glory? Did we accept the affirmative of this it would at once paralyze all effort deaden all ambition.

"This life were brutish did we not sometimes
Have intimation clear of wider scope
Hints of occasion infinite, to keep
The soul alert with noble discontent."

When, gentlemen of the legal profession, I approach the task of saying a few words to you, I recognise that I am treading upon unfamiliar ground, that I am about to deal with a subject as old as the human family, which has grown with the growth of the race, and has changed with the changing opinions and necessities of the times, but which today rests upon the same foundation as when Moses brought down from the mountain the ten commandments, or when Christ epitomised the whole law of his day and of all time since, or to come, in the golden rule.

That foundation is the right of the individual man, stated in our Declaration of Independence, to life, liberty and the pursuit of happiness. There may be questions and disputes as to what constitutes liberty, as to how far its enjoyment by the individual, and his pursuit of happiness, may infringe upon, or curtail, what his neighbor considers his right to the same privilege, and it is about these simple questions, I conceive, that all the disputes and contentions of the law courts, if we were able to resolve them into their fundamental elements, turn; and it is to regulate and define the relations of man to man, of community to community, of nation to nation as respects these three things, life, liberty and the pursuit of happiness, that all the laws that have been made from Moses to Solomon, from Solon to the present time have been formulated and given in one way or another the force of a "rule of action." Law has been defined as "A rule of action established by recognized authority to enforce justice and regulate duty." Naturally, as I have said, law has conformed to the changing ideas of justice and duty incident to the progress of the years and the growth of intelligence and development of civilization. No one can therefore admit, I conceive, that the application of the principles of the law has reached perfection, that nothing now remains but to conform old precedents and established decisions to new questions. Your knowledge of the history of your own

profession will teach you better. The criminal law has vastly changed since men were hanged for petty theft, and equally great changes have taken place in what, I believe, are called equity proceedings, changes which I imagine would be to the men of the time of Coke and Blackstone, difficult to comprehend.

When our senatorial author was writing his essay matters were looming large on the horizon in governmental and administrative affairs which then, and still, require the most intelligent and thoughtful action of our law makers, which when brought before our courts for decision, will find few precedents in the past to guide those required to pass upon them. Our colonial possessions in the far east, and those nearer at hand, the control and regulation of large aggregations of capital, the new and complicated problems in commercial law, and in the regulation of traffic, present to you gentlemen, matters which may well engage your attention which must convince any one that matters of jurisprudence still remain which the men and courts of the past and present have not even touched upon.

Some one among you may yet do for the United States and for her new and as yet unassimilated citizens, I cannot call them subjects, what Lord Cromer has done for England, and in a wider and better sense, for Egypt. From the law department of this university may yet be sent out, possibly he sits before me, some American Turgot who shall do for America what that great financial minister of Louis XVI, whose writings on finance, jurisprudence, politics in the broadest sense, taxation, philosophy and I know not what more, may well be studied today, did for France. It is of particular interest to us that this great man predicted, a quarter of a century before it took place, the inevitable separation of the American Colonies from Great Britain, if the Mother Country persisted in her course toward them, and that he pointed out to Spain the folly of the course she was pursuing toward her insular possession in the East and West Indies, a course, which doggedly followed, led, as he predicted, to their loss.

Our financiers, our doctors of the tariff, our tax regulators, have much to learn from this great man, and some of you may, by the application of his wise teaching and of the principles which have here been taught you, bring order out of what now seems to many of us almost chaos.

I have had the fortune, or misfortune, to have been in many courts, to have followed many trials and listened to many and varied decisions. If, gentlemen, there is one thing more than another which I have carried away from those experiences, it is a sense of the dependence which you men of the law place on tradition and precedent, the difficulty you experience in getting

away from them in adapting your ideas and your rulings to the changing, broader and better views of the times. Trammelled by precedent or impeded by the lack of precedent, law has seldom led in medical or sanitary reforms, and rarely followed, except at great distance and with halting steps. I say this with much deference, and with a full appreciation that I am by no means prepared to prove my assertion, but this is what has impressed me. I may be wrong, it is possible that I am not however telling you anything which you have not yourselves discovered. It has been naturally in matters medical that I have been most concerned, and upon which my observations are based.

There is one word in the language pertaining to matters with which much of my life work has been concerned, with which consciously or unconsciously you and the courts have constantly to deal. It has to do with every contract of whatever sort, with every suit at law, with every defence made for crime or misdemeanor. That word is "insanity." In the disposition of property by will, deed of trust, or other conveyance, the question is always pertinent, though happily not always of necessity raised, "is or was the person conveying this property of sound and disposing mind and memory?" The integral parts of the body politic, the families, are just as much under its dominating influence; questions of marriage, the continuation of family relations, the severance of the marriage tie, the descent of property, are all modified in more instances than is generally known by this one word "insanity." The fate of dynasties and nations has been governed by it, and pages of history stand today which would read very differently had not insanity placed its finger on some ruler or his minister and changed everything. What effect for instance had the insanity of Chatham in preventing the conciliation of the American Colonies, whose friend he was; what more serious effect the attacks of madness of George III. destined to end his days in hopeless fatuity, blind and demented.?

You will agree with me, I think, gentlemen, as to the importance of this word, referring as it does to a disturbance of those regular, orderly, methodical mental operations essential to the proper conduct of the affairs of men and nations. To you here in New York it is a word of grave import. Within your borders, supported by public taxation, involving the expenditure annually of more than \$6,000,000 you have in your well equipped and excellently conducted State Hospitals in round numbers 25,000 insane. Of the more than 80,000 admitted to those hospitals since October 1, 1888, more than 50% were of foreign birth. You are somewhat unfortunately situated in that the larger proportion of immigrants land in New York City and a considerable proportion (in

1904 over 30%, or more than 260,000) remain within your borders. What proportion of these are destined to become public charges in your almshouses, prisons and State Hospitals no one can say, but the number will be sufficiently large to warrant your thoughtful attention. I am wandering a little from what I proposed to say, but in doing so I have but enlarged the scope and importance of the subject. I ventured, somewhat rashly perhaps, to criticise the application of the law to questions medical. In the famous and now historical McNaughten case, in 1843, twelve judges in England submitted answers put to them by the House of Lords on the question of responsibility, and from that day to this, with few exceptions, the knowledge of right and wrong as to the act involved, on the part of the prisoner, has been the test of responsibility for criminal or other acts. This is not the time nor is it the place to discuss the matters here involved, but I submit to you young gentlemen this broad problem of the responsibility of the insane involving many and intricate points of jurisprudence and of medico-psychology, and urge upon you the importance of its solution.

The difficulty which confronts the bench and the bar when met by this and similar problems are not far to seek. It would not be fair to ask you to be expert in medicine, whether involving questions of mental responsibility, or less important and difficult ones, but it is not, I think, asking too much of your teachers to give some instruction, or cause some to be given, to you and those who follow you, in accordance with modern ideas of mental pathology. First at Heidelberg, now in Munich, Kraepelin, the man who has done more probably than any other one man of his time to clarify and change our conception of diseases of the brain, has been giving a regular course of lectures on Forensic Psychiatry with practical demonstrations taken from the wards of his clinic, and these lectures are eagerly followed by judges and attorneys, to their profit, the benefit of their clients, and the enlightenment of the law.

You have not far to search, you see, to find matters medical which may well engage your attention, and conjoined with these and cognate to them are important subjects relating to the regulation and restriction of immigration which must engage the earnest attention of the best minds if we are to control in any measure conditions which are now injecting into the blood of the nation additional sources of pauperism, crime and disease, and imposing upon us additional burdens of taxation.

The burden of these problems is upon your shoulders, young men, and upon those of your associates in the law. It rests there because you are supposed to be learned in the law, and able out of

its provisions to apply old enactments, or devise new ones, which shall serve for their solution. You cannot, gentlemen, in your future work, like Numa, gain inspiration at the fountain of Egeria, nor may you solve your difficulties, as did Lycurgus, by consulting the Pythian oracle. You must be guided by the principles of law as announced and defined by the courts, and by the statutes enacted by various legislative bodies, under constitutional restrictions.

To the duty of each hour and each day you must bring the best that is in you of mind and heart. Honesty of purpose and act, justice in dealing with all men must, to ensure success and respect, be your guides. Before you enter upon the practice of your profession you must take a solemn oath to support and defend the Constitution of your State and of the United States. This is the highest civic duty which any man can be called upon to assume. No more important, no more sacred calling, could be yours. The higher interpretation which you put upon that call, the greater zeal which you show in answering it, the more diligence which you exhibit in perfecting yourselves for the best service to your profession and your country, the more assured will be your success, and as you succeed, as you make your mark upon the history of your times, you will reflect glory upon your Alma Mater.

What can I say, my fellow physicians, to you, and what to these others so nearly related to you in their professional work of pharmacy and dentistry, in the few moments which yet remain to me? Some of the matters which I have urged upon your fellow students of the law school apply as well to you, and you must bear your part in bringing them to a satisfactory and wise solution.

You, I am sure, have no complacent notion that medicine has about reached the mountain top. You realise, I believe, that the problems in medical science yet to be solved, notwithstanding the marvelous strides which have been made in the last quarter of a century, afford as great opportunities to the student and investigator as did those which confronted our ancestors. In anatomy there are yet unexplored fields, and this is especially true of the anatomy of the nervous system. It follows as a natural corollary that equal opportunities lie before the student of physiology. Chemistry and especially physiological chemistry affords ample scope for the most enthusiastic and energetic student, and from researches in that department we may expect, judging by the past, to achieve results which shall demonstrate the causes of many obscure diseases and add to the resources of materia-medica or enlarge and make more accurate our knowledge of the action of drugs now in use. In surgery, within the memory of men still at work in their profession, anesthesia has robbed the operating room

of its terrors and wonderfully broadened surgical possibilities. Asepsis and antisepsis are of such recent application that there are many within the sound of my voice who recall the work of Pasteur and the application of his discoveries by Lister and the still more recent studies of many men in bacteriology, with the gradual development of surgical technique of the present day.

Who shall say, however, that either anesthesia or asepsis is not yet susceptible of being made more safe and easy of application on the one hand, or more certain on the other. Fellow students of medicine, for you are yet students and must so continue, in the history of the world many names connected with our profession are "writ large" on its pages. Hippocrates of Cos, whose oath of office you have taken today, Galen and Celsus, Harvey and Sydenham, Ambroisé Paré, and Louis and Laennec, Claude Bernard, Pinel, and Esquirol his pupil, Rush, the Warrens, Jenner and Lister and, in more recent times, and nearer home, to pass over a long line of men who wrought valiantly, the Flints, Dalton, Hamilton, Moore and Miner, White and Rochester here in Buffalo, accomplished for medicine and surgery things the fruits of which we are now reaping.

It is at infrequent and irregular intervals that a Jenner or a Lister, a Pasteur, a Virchow, or a Koch rises to the height of true leadership in medicine, and leaves his impress upon his times and his profession. The future holds as many opportunities for some one or more of you to reach this exalted and enviable position as it did for those who have gone before you. Tyndall tells us in one of his admirable essays, that on the Sky, that "In his efforts to cross the common bourne of the known and the unknown, the effective force of the man of science must depend to a great extent upon his acquired knowledge." Your effective force will certainly depend upon your acquired knowledge. I do not mean the knowledge you have acquired here of medical science. You have but received an introduction to the studies which must follow the reception of your diplomas. But upon the thoroughness with which you have applied your minds to your studies here, will depend your ability to continue them, away from the direction of your teachers, and upon the breadth of the general knowledge which you have brought to your aid in obtaining special knowledge, and which you must continue to cultivate and broaden, will depend in a very large measure your future success and usefulness.

The broader your culture, the more varied your intelligence, the greater number of points at which you are able to come in contact with the world of letters and science, the greater will be your advantage in the race. Cultivate then a broad general intelligence, take an interest in the affairs of your community, of your state,

of the nation ; above all cultivate your imagination. Don't permit it to carry you beyond the bounds of reason or into the realms of the improbable, but an imagination, capable of forming a good working hypothesis is a valuable possession to any man of science. It may, it will at times, lead him astray, but then again, it will lead him to discoveries and achievements which by the simple, cold processes of reason and of the library and laboratory would never be attained.

Tyndall in the essay to which I have referred says: "In the house of science are many mansions, occupied by tenants of diverse kinds. Some of them execute with painstaking fidelity the useful work of observation, recording from day to day the aspects of nature, or the indications of instruments devised to reveal her ways. Others there are who add to this capacity for observation a power over the language of experiment, by means of which they put questions to nature, and receive from her intelligible replies. There is, again, a third class of minds that cannot rest content with observation and experiment, whose love of causal unity tempts them perpetually to break through the limitations of the senses, and to seek beyond them the roots and reasons of the phenomena which the observer and the experimenter record.

"To such spirits, adventurous and firm, we are indebted for our deeper knowledge of the methods by which the physical universe is ordered and ruled."

The physician, of all men in the community, should be interested and interested actively in all public affairs. Who better than he, if properly trained, can advise in matters educational. You probably, here in Buffalo, have your school houses and surroundings inspected by sanitary officers ; you guard the pupil against the spread of epidemic or contagious disease ; you possibly have intelligent medical inspection as to the hearing and eyesight of children, so that these two important pathways for incoming stimuli to the brain may be in the best condition. You do all this possibly, and perhaps more, but what expert inquiry is made or advice given as to the capacity of the children sent to your schools to profit by all this? There are all grades of cerebral development, many varieties of cerebral receptivity or impressibility, and in many, many more instances than are recognized the backwardness and stubbornness, or moral perversity of children are due to innate brain defects of such a character as to either seriously impair or practically abolish the prospect of future mental development. Yet term after term, year after year, these pupils remain in the schools, in the same grade, to the chagrin of parent and teacher, to the detriment of fellow pupils. The hopeless experiment goes on in school after school of attempting to fit the same

course of studies to all pupils, without inquiry by those best trained to judge, as to their brain capacity for that or any other course of instruction.

Not only in education, but in morals the physician, of all men, has a field for his best work. There are those who hold and teach that there is implanted in man what they term the moral instinct, or moral sense, a fundamental immutable faculty, which points out the straight and narrow path of rectitude, which applauds, or at least approves, what he does that is right; which reprove's that which is wrong. Those who hold this theory seem to lose sight of the fact that the standard of morals has changed, and is changing, changing I believe for the better. Not only is this true but it differs at the present day with different nations, and among savages there is none. It cannot be denied that as civilization has advanced, as man has emerged from his primitive state, his appreciation of his relations to his fellowmen, as well as his self-appreciation, that is, his appreciation of what to himself is degrading and what is uplifting, has greatly broadened.

As Lecky says in his "History of the Rise and Influence of the Spirit of Rationalism in Europe," "Gradually, by the silent pressure of civilization a profound change passed over our public opinion. It was effected not by any increase of knowledge nor by any process of definite reasoning, but by the gradual elevation of the moral sense."

I take it that we must admit that man's moral nature results from the accumulation of certain "use habits" of the brain transmitted from generation to generation, modified by environment, and perfected, or the contrary, by education and training. In other words, heredity environment, and that includes both social and physical environment, and training, all go to make up for the individual his ability to appreciate the moral law and to respond to the requirements of the law.

One of your papers, a day or two ago, commented editorially under the caption, "Morals by Surgery," upon a case of brain surgery, the operation happily resulting in a great change for the better in the conduct and habits of the patient. Surgery unfortunately cannot attack the cases I have in mind; they result from defect rather than disease. There are numerous cases, the moral imbeciles, the so-called moral degenerates, found in our schools and colleges, and in our criminal courts, with whom the physician rather than the courts or the penal officer should deal.

If the physician is, as a citizen and a professional man, interested in those things which go for the best training and culture of the coming generation, he is all the more interested in those matters which affect the life, health, and progress of the present,

for they are elements which enter into his every-day life and occupation, which must be considered at every bedside.

As man has passed across the stage of human existence from the time of the cave dweller to the present day, there have come to his nervous organization increased demands: more and more complex stimuli have demanded response from his nervous system, especially from his brain, and with the increased demand and response there has resulted a more complex and thoroughly differentiated organ. With the elaboration of structure to correspond with and meet the necessities of increased and wider function have come certain dangers or penalties. The greater the differentiation of parts, the more active the response to stimuli, the greater the instability, and consequently the more pronounced the tendency to disease.

The straining after the meretricious in everything, the desire to be seen and known of men, which seems to be the predominating social feature of the times, among many of the citizens of our country, brings as the inevitable result of the rush and push, the disappointment and ruin which so often follows from so many misguided ambitions its train of physical and mental wrecks.

An eloquent clinical teacher ("Collected works of P. M. Latham," Vol. II, p. 345), writing 70 years and more ago, said: "Among the higher and educated classes there is in this age and country (England) a wonderful striving for all the objects of wealth and honor and power. We need only think upon the strife of politics, the hazards of mercantile gambling, and the wear and tear of hard professional toil to see how many there must be who, from the common business of life, have derived both to their minds and bodies new feelings and impulses and new susceptibilities of disease. These susceptibilities belong chiefly to the nervous system."

If the rush for power, place and pelf were sufficient in its influence upon the health and mental and nervous stability of the race in the early half of the past century to attract the thoughtful consideration of medical men and call forth the warning which I have just quoted, what must be the lesson to be gained from the conditions which confront us at the opening of the present century?

I commend to you in preparing for the great life work before you, to cultivate the art as well as the science of medicine. Science is cold, observing, calculating upon phenomena and their cause. Art is live, real, warm, her ways are pleasant and her manners hopeful and cheering. I think sometimes that we forget, in our eager pursuit of exact knowledge, in our cold scrutiny of phenomena, in the self-possession to which we must school our-

selves in all emergencies, that we are dealing with men and women and not mere cases, and that in our interest in the disease, we lose sight of the individual, and omit many things which would go far to his comfort and peace of mind and which may have an influence we cannot weigh or measure in the final outcome.

To your associates, the pharmacists and the dentists, what can I say? My work has been of such a character for years that I have written few prescriptions, and not having the fear of that demand, which those who seek the advice and treatment of the general practitioner make, for something to take, called medicine, I have had a lack of need of giving drugs, which has been to me gratifying, and,—shall I say it in this presence?—to my patients, of great benefit.

Drugs, medicines and pharmaceutical preparations are needed and necessary, and when needed it is fortunate that men like you are enabled by study and laboratory work and training to prepare them. We are hearing more or less in the public prints at present about Drug Trusts, proprietary preparations and the like. The presence here of a class like yours is the best assurance which the public, which takes its medicines always on trust, whether from the doctor or as advertised in the morning paper, can have of better things in store.

No one approaches a dentist without fear; he, and conscience, make cowards of us all, and I do not differ from my fellows. I have fallen into the hands of some of you, and sometimes in emergency I could not choose my doctor. When I found an American trained dentist, however, no matter where, I felt more confidence than when I approached the bungling, harsh, and not over-tidy "Zahnarzt," to whose ministrations I have had to submit on one or two occasions. Your training has been in some degree, that of the medical man; you aid and sometimes supplement his work, and it is not difficult to imagine that in time to come yours will be, as it should, regarded as a branch of the medical profession.

I commend to all of you, doctors, lawyers, dentists, pharmacists, the wise words of a citizen of this State who has made, and is destined to make, his mark upon our national history. When asked why he had chosen to assume important, trying, burdensome duties, involving public responsibility, rather than wait for a more attractive and exalted position, to which he might with much confidence aspire in the future, he said, "My feeling is that the things of the present one has the opportunity to do are substances; that the things one sees possible in the future and tries to get are shadows."

Instead of being pessimistic, in place of decrying the supposed decadence of the times, and the alleged lack of opportunity, adopt

for your guiding principle the words of the great Apostle of Christianity:

"Whatsoever things are true, whatsoever things are honest, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of *good* report, if there be any virtue, if there be any praise, think on *these* things."

You will find the world, if you open your eyes, full of illustrations of all of these to afford food for thought, and among your fellow men and women innumerable examples of lives based on these virtues to give you examples to imitate and emulate. Do not, I beg of you, enlist in the ranks of those who are forever crying don't, don't, but be among those who exemplify the force of that short but expressive word "do."

Citizens of Buffalo,—I had almost said fellow-citizens,—so much do I feel at home,—residents of no mean city, you have much to congratulate yourselves upon, in the beauty, wealth and influence of the place of your homes and your business. A clergyman, whose name and memory are revered in hundreds of your homes, in an address at the close of thirty-one years' pastorate of one church said:

"I remember the city of my birth and boyhood, when her jacket was homespun and her kirtle was linsey. As she grew more refined and womanly, her children clad her in silks, placed a crown on her motherly forehead and called her a queen, the Queen City of the Lakes."

The period which has elapsed since I left the halls of your University is of about the same length as that closed by this address. As I come back from time to time, your growth, your wealth, the growing beauty of your streets and residences, the activity and push of your business sections, cause me to feel in somewhat strange surroundings. In 1846 when this University was organized and the work of the department in medicine inaugurated, the population of your city was but 30,000 in round numbers. In 1855 the assessed valuation of property, real and personal, but \$35,488,557.00. Today your population is more than ten times what it was in 1846 and the assessed valuation (not by any means, I take it, the real value) of your property, real and personal, together with certain franchises, which are taxed, is over 260,000,000 dollars.¹

1. Cannot this city, upon this basis, afford for a period of, say 10 years, to add to its tax-rate, for the support of a department of letters in the University, the sum of one and one-half cents upon each one hundred dollars? This would ensure to the University an income of about \$40,000.00 per annum. With this aid other contributions from private sources would inevitably be attracted and the institution be put upon a self-supporting basis. As a business venture alone, as a means of attracting money to the city, it would be a paying investment. The students now attending the school spend annually in the city for board, clothing, books, fees and incidentals, more than double this sum and the enlargement of the University would more than double it again.

Your University was chartered by the patriotic and enterprising gentlemen who were active in its inception upon broad lines, but it received practically no public aid, and has received none since. Its one department first organized, was carried on for years by the tireless, self-sacrificing devotion of the men who accepted teaching positions therein. It attracted to your city men whose fame as physicians and surgeons, teachers and authors, is world-wide. The work which these men did for medical science and for humanity cannot be estimated or measured, yet they worked so quietly, so unobtrusively, that many citizens of your town were scarcely aware that such work was being carried on in their midst. Now these other departments have been added, and you have not only a most thorough school of medicine, but of law, pharmacy and dentistry, the presence today of the members of whose faculties prevents my telling you, what you know in part, of the high estimate placed upon their teaching by professional men.

All these have been added to the resources of your city without any public aid or private subscription, except the small sum raised to erect and equip the old brown stone structure which some of you may recall on Main and Virginia Streets.

Now, and for some time, a movement has been on foot to round out, or crown, rather, the University organization by the establishment of the department or school of arts or letters,—for which the charter makes provision. Let me urge upon you men of wealth and business activities the importance, the necessity, the wisdom of bringing about this consummation. Crown your city not only as Queen of Commerce, but a Queen of Education, a leader in all that stands for the general uplift of the people of this community and, through those who shall come here for training, of still other and widely separated communities.

Fire, earthquake, the tornado may destroy your mansions, your factories and storehouses and lay waste your beautiful streets. Commercial disaster may sweep away your accumulated wealth, but neither things present nor things to come can move or destroy the value of a sound education, the opportunities for which you can here provide. The temples of Greece are in ruins, her classic groves where philosophers were wont to walk and teach are gone, but the teachings of her sages survive.

"For wisdom," we are told in Ecclesiastes, "is a defence," and the preacher goes on to say "money is a defence." He concludes, however, "but the excellence of knowledge is that wisdom giveth life to them that have it."

Lay the foundation of your college of Arts broad and sink them deep. Do not put your money in brick and mortar and

stone, except so far as may be necessary to shelter teachers and scholars, but rather in men and books and apparatus. Attract to your school men who love art and literature and science for what they mean to them, and for what they can be made to mean to their pupils, and through them to the men and women who shall come after them. Such men are to be found. such men are eagerly longing for such an opportunity as you can give them here.

I know a few such, and I trust you are fortunate enough to know more.—men whose very acquaintance is the beginning of a liberal education. You sit by the fireside or in the woods or walk afield with them and they lead you into realms of wisdom and delight in their talks of art, literature, science; of men and affairs, of history and fiction, of moving scenes by field and flood; and the petty affairs and worries, the small or large ambitions of life are forgotten as you get a glimpse of how such a man can say:

“My mind to me a kingdom is;
Such present joys therein I find,
That it excells all other bliss
That earth affords or grows by kind.”

Of the power and influence of the right kind of teachers you all know; of what they were to the school with which they were connected you can readily recall examples. Of one such man, for many years the head of Williams College, you know the estimate made by President Garfield, “a log with Mark Hopkins sitting on one end is a University.”

Some months ago I received a request to state what influences in my early life had contributed, in my estimation, to whatever success has attended my professional career. While I did not think that I had accomplished enough to make an answer to the query of any value or interest, and therefore declined to answer it, my thought instinctively turned to the teachers of this University, and particularly to three with whom I was brought, as a student, and afterward, into more intimate relations. Next to what is due the dear lady, the wise and loving mother, who awakened and encouraged in me a desire for books and study, and to another, a daughter of Buffalo, whose encouragement, counsel and gentle criticism have been my chief good, I owe to the teaching and example of three men who lived and worked here in Buffalo, and who taught in this University, whatever ambition to succeed, and whatever success has come to me. Miner, White and Rochester,—men who in their day were part of the glory of your University, and who by their work and teaching and reputation were part of the glory and honor of your city.

Build whatever you erect upon the foundations which you will prepare for your department of arts and letters only after careful planning and mature deliberation. Think not of immediate satisfaction and personal gratification, but of future usefulness and stability. You will recall the laws and rules laid down by Plato for his Republic; I may be permitted to revert to some of these in urging the completion of your University.

Well-devised rules were made concerning the training of the young. The most careful attention was paid to good surroundings; nothing mean or vile was to meet the eye or strike the ear of the young scholar; music, literature and gymnastics were first taught; gentleness was to be united with manliness; beauty of form and activity of mind were to be mingled in perfect and harmonious accord. The object of education was to fit the growing child and youth to become a good citizen. The primary object was not the good of the individual as an individual, but the good of the state or the whole by making the units thereof best fitted to assume either the duties of citizens, teachers or legislators. The object of learning was the good of mankind.

Bacon somewhere says: "Men have entered into a desire of learning and knowledge, sometimes upon a natural curiosity and inquisitive appetite, sometimes to entertain their minds with variety and delight, sometimes for ornament and reputation, and sometimes to enable them to victory of wit and contradiction, and most times for lucre and profession, and seldom sincerely to give a true account of their gift of reason *for the benefit and use of man*, as if there were sought in knowledge a couch whereon to rest a searching and restless spirit, or a terrace for a wandering and variable mind to walk up and down with a fair prospect, or a tower of state for a proud mind to raise itself upon, or a fort or commanding ground for strife and contention, or a shop for profit or sale, and not a rich store-house for the glory of the Creator and the relief of man's estate."

The Athenian youth was taught that his duty and the object of his training and education were the advancement of his country's good, not his personal benefit. In his oath on being admitted to citizenship he swore to endeavor to leave his country as a result of his life, in a "better, not a worse condition."

How many of the youth of the present day or of the day when you and I, my hearers, were school boys and girls, are or were taught such high ideals by precept or example? What effect upon the growing generation does the present-day strife for power and pelf have in lowering its appreciation of the true value of learning, of the real power or influence of ideas?

Nothing mean or vile was, you will recall, to meet the eye or strike the ear of the young pupil. Are we careful in this respect as we might be? Do we appreciate and value the influence of environment in the training of our youth, as well as in the lives and conduct of our citizens in general? The growing application of good architecture, both as applied to buildings and to cities as a whole, of mural decoration, of landscape art in our parks and home surroundings, is a hopeful sign.

Not in "the magic numbers and persuasive sound" of music alone, is there power to move the living soul, but beauty keeps "A bower quiet for us, and a sleep full of sweet dreams, and health and quiet breathing."

The opportunity is before you, men and women of Buffalo, and of Western New York. Will you seize it, will you rise to the occasion? As you do, you will be meeting a great duty as it should be met; as you neglect it, you will be hindering the birth of better things, putting off opportunities which your sons and your sons' sons should have, to attain high thinking and right living.

Much that I hope you will do, will be for posterity, and it is well that it should be. Having received much from those who have preceded you, it becomes you to hand down to those who come after you even more, for you have had greater advantages, wider opportunity, than did your ancestors. You remember the words of Ruskin (*The Lamp of Memory—Seven Lamps of Architecture*): "When we build let us think that we build forever. Let it not be for present delight nor for present use alone; let it be such work as our descendants will thank us for, and let us think, as we lay stone on stone, that a time is to come when those stones will be held sacred because our hands have touched them, and that men will say as they look upon the labor and wrought substances of them, 'See! this our fathers did for us.'"

The Story of the Discovery of the Circulation.

A Study of the Times and Labors of William Harvey.

Being the Doctorate Address Delivered at the Annual Commencement of the
Medical Department of the University of Chicago, (Rush
Medical College), June 13, 1906.

By ROSWELL PARK, M. D., LL. D., Buffalo, N. Y.

HISTORY in general is but a record of the succession of great events or epochs which have moulded the world's affairs. That which is of the greatest import in the life of the individual may count for little in the lives of his contemporaries, and yet it must be said that in the events of today there has occurred a great

epoch in the life of each of you, presumably the most important as yet in your personal records. This day is then in your personal histories one of the greatest importance. It is desirable, then, that your lives be so moulded and influenced by it that you may long hence look back to it and recall its significance.

I do not know what advice I can give you which will be more fruitful of results, than that among your studies you include that of the lives of the great men who have moulded destiny and made the world's history. Their lives were modified by little things, as have been and will be yours, and yet out of small matters grew for them and for us some of the most far reaching effects. Select the really great men who you best happen to know and analyze their characters that you may appreciate how they have become great; while if they have, as all great men have, traits of smallness, study even wherein they are small, and how such faults may be avoided.

History runs, as does a fairly steady stream, save that every now and then some event abruptly diverts its course or influences its current. It has been so, for instance, with the history of medicine. For the first sixteen hundred years of the Christian era men engaged in the crude practices of our profession, utterly ignorant of the course of the blood, as well as of its purposes. Then appeared upon the scene a man who did his own thinking, who was willing to free himself from the shackles of the past, to observe nature and to reason therefrom. In this way came suddenly upon the world, as it were, an appreciation of the Circulation of the Blood, than which perhaps no event in medical history has been of greater importance or reflected more credit upon its demonstrator.

It is my purpose, then, today to try to tell you, in a semipopular way, how William Harvey came to make this great discovery, as well as to give you some idea of the difficulties under which he worked, and of the men and influences that surrounded him, believing that rather than spend a half hour in humorous platitudes which may provoke a smile but which are quickly forgotten, it is much better to try to implant something which may linger a while in your memories, and sufficiently impress you with the value of observation and inductive reasoning, since if you become thus fully impressed you will be spared in the future many sad errors of speech and even of thought.

Before telling the story of Harvey's life and work let us study for a few moments the general condition of affairs in Europe, in order that we may better understand the men whose influence surrounded him, as well as the spirit of the times and men's habits of thought.

Among the monarchs reigning in various parts of Europe during Harvey's time there were, for instance, in that part of the Empire of the West which was called Germany, Rudolph II, Matthias and Ferdinand. In Sweden reigned Kings Sigismund, Charles IX, the great monarch Gustavus Adolphus, and Queen Christine. In Prussia the throne had been occupied by Joachim, George William and Frederick William, as electors, this being before the days of the Prussian kings. In Russia the Czars Boris Godunow, Michael Theodore and Alexis had occupied the throne.

France had but recently passed through the inhuman butchery of the massacre of St. Bartholomew and its accompanying persecution of the Huguenots, under Charles IX, who expressed the hope that not a single Huguenot would be left alive to reproach him with the deed, but who died himself soon after the massacre, which is said to have caused him bitter remorse. Charles had been succeeded by his brother Henry III, a weak, fickle and vicious monarch, whose weakness caused him to be embroiled in civil strife, which was only concluded by his own assassination at the hands of a Dominican friar. Then came Henry IV, he of Navarre, afterwards surnamed The Great, who fought the famous battle of Ivry in 1590, and who reigned for twenty-one years, the greatest and most popular sovereign who ever occupied the throne of France. Notwithstanding his noble qualities he did not succeed in preserving his court from many of the contaminations of the age, and in his reign it is said that no less than 4000 French gentlemen were killed in duels, chiefly arising out of amorous quarrels. He was succeeded by Louis XIII, who was still on the throne when Harvey died.

In Harvey's own country James I was occupying the throne when Harvey appeared upon the scene. He was that royal pedant whom the Duke of Sully pronounced "the wisest fool in Europe." After his death, and when Charles I ascended the throne during his twenty-fifth year, in 1625, Harvey was preparing to publish his great work. It was this Charles I who retained as a favorite the worthless scoundrel Buckingham, whose misconduct in Spain prevented the proposed marriage of the king with the Spanish Infanta and brought about the Civil War. It was because of the cost of this war, and of the king's disputes with Parliament regarding the matter, that England was rent between the conflicts of the Cavaliers and the Roundheads, two of the consequences of this intestine strife being the execution of the Earl of Strafford and of Archbishop Laud. The troubles thus engendered finally cost the life of the king himself, who was beheaded in 1649. Harvey even lived to see the first half of the short tenure of office of Cromwell as the Great Protector, and

was perhaps fortunate in dying before began the reign of that odious profligate Charles II.

It is worth while to enquire for a moment what was doing on this side of the ocean at this period which we have now under consideration. In 1607 Virginia was settled by the English, in 1614 New York by the Dutch, in 1620 Massachusetts and, three years later, New Hampshire, by the English Puritans; in 1624 New Jersey by the Dutch, in 1627 Delaware by Swedes and Finns, in 1630 Maine by the English, in 1634 Maryland by Irish Catholics, in 1635 Connecticut by English Puritans. Thus it will be seen that the active period of Harvey's life was synchronous with the beginnings of our colonial activities. Very little knowledge of what was going on in the then world of science was brought to this country at this period of its existence, however, and it was many years before in these colonies there were any exhibitions of scientific interest save in extremely scattered and sporadic cases.

Among Harvey's literary associates were a number of celebrated English poets, for example,—Marlowe (1593), Spenser (1598), Beaumont (1615), Shakespeare (1615), Herbert (1633), Ben Jonson (1637), Massinger (1639). Lord Bacon died a year or two after the appearance of Harvey's book, while Baron Napier, the inventor of logarithms, had passed away. His contemporaries in Italy, where he had studied, included Tasso (1595) and Galileo (1645). Rubens had died in 1640, Michael Angelo in 1564 and Titian in 1576. In France, Calvin, the practical murderer of Servetus, had passed away in 1564, Beza died in 1605, Descartes in 1650, Pascal in 1662 and Gassendi in 1655. Portugal had produced but one great figure in the 16th century, namely Camoens, who died in 1579. In Spain, Loyola, the ascetic and fanatic founder of the Jesuits, had joined the great majority in 1556; but Cervantes did not die until 1616, Lope de Vega in 1635, Velasquez in 1660 and Calderon in 1667.

In Germany some great figures had but recently disappeared. Paracelsus died in 1541, Copernicus in 1543, Luther in 1546, Hans Holbein in 1554, and Melancthon in 1560. Mercator, who introduced a new method of cartography, died in 1594, Tycho Brahe in 1601, Keppler in 1631, Van Dyck in 1641, Grotius, the great scholar, in 1645, Rembrandt in 1668 and Spinoza in 1677.

In philosophy, scepticism was the prevailing doctrine in the time of Harvey. It had been founded a hundred years previously by Montaigne, and continued by Charron, the chaplain of Queen Margaret of Navarre, who died in 1603, and who declared all religion to be opposed to human reason;—a remarkable attitude for a chaplain to assume. Opposed to the scepticism of Harvey's day was the mystic, Cabalistic or supernatural philosophy es-

pecially represented by Böhme, a peasant shoemaker, uneducated and yet wonderfully gifted. He had been the philosophical colleague of that great Meistersinger, Hans Sachs. Later philosophers and thinkers, yet belonging to Harvey's time, were Pascal, the great Jansenist, who discovered the variations of atmospheric pressure at different levels, and Malebranche, who figures prominently in the history of philosophy.

Descartes, who died in 1650, held the pineal gland to be the seat of the soul. He was the discoverer of the laws of refraction of light and furnished the explanation for the rainbow. He attained greatest eminence in mathematics, physics and philosophy, and was one of the inventors of modern algebra. One of his greatest opponents was that noble Jew, Spinoza, whose colleagues had expelled him from the Sanhedrim to the sound of the trombone.

The Italian Dominican Campanella, who died in 1639, considered the foundation of knowledge to be supernatural revelation and its perception by the senses. In spite of these views he came before The Inquisition on a charge of heresy and of cooperation with the Turks, was tortured by the rack and imprisoned for thirty years.

The mystic or Cabalistic notions of Harvey's day have just been mentioned. Under them we may recognize many degenerate products and amalgamations of the real doctrines of Paracelsus. The doctrines of the Rosicrucians, as well as of Zoroaster and the Cabala, were revived and made to do strange work. There was, for instance, that Sir Kenelm Digby, who died in 1605, a King's chamberlain, who posed among the English as a so-called Rosicrucian. It was he who suggested the famous "*sympathetic powder*," which was to be applied to the weapon by which a wound had been inflicted, after which the *weapon* was anointed and dressed two or three times a day, while the wound itself was carefully bound up with dressings and left alone for a week. This was perhaps much the better course, but it will show what strange notions prevailed in those days.

What it meant to run counter to ecclesiastical policy and theological dogma appears not only in such tragedies as terminated the lives of Bruno and many other martyrs to science, but in such facts as these; for instance, when in 1624, just when Harvey was preparing to publish his work, some young chemists in Paris, seeing the benefit of the experimental method, broke away from Aristotle and the canons of theological reasoning, the faculty of theology appealed to the Parliament of Paris, which latter prohibited all such researches, under the severest penalties.

This was the time too when such exhibitions as the following were altogether too frequent;—One Quaresmio, of Lodi, came out with a ponderous work entitled “A Historical, Theological and Moral Explanation of the Holy Land,” in which he devoted great space to the question of The Dead Sea and the salt pillar supposed to represent Lot’s wife, dividing a long chapter upon the subject into three parts, dealing with the method and the locality of this transformation and the question of the existence at that time of her saline remains. Thus, with his peculiar powers of reasoning, he was able to decide the exact point where the saline change took place, and finally showed that the statue was still in existence.

Lord Bacon was also an older contemporary of Harvey, having been born in 1561 and dying in 1626, shortly after the appearance of Harvey’s great work. His services to analytic science need no description here, but it is worth while to remember that Harvey, like many others, must have come under his influence and have profited by his teachings in logic and analysis.

At about the time when Harvey made known his discovery Bacon was publishing his views of the laws of transmission and reflection of sound. Great man as he was, with a keen foresight into the value of the recent inventions of the compass, gunpowder and printing, he nevertheless was himself so narrow, in some respects, that he placed but little value upon the discovery of Copernicus. He, however, paved the way for one in some respects still greater, namely Isaac Newton, who, however, had scarcely attained man’s stature when Harvey died.

How much we owe to the two great Bacons of history one cannot indicate in this short résumé. Roger Bacon (1214-1292) seems to have been the first great thinker along truly scientific lines. He was more than a mere chemist and, as White says, more than three centuries before Francis Bacon *advocated* the experimental method Roger Bacon had *practised* it, and in many directions. He did more than anyone else in the middle ages to direct thought into fruitful paths, and only now are we finding out how nearly he reached some of the principal doctrines of modern philosophy and chemistry. Most important of all, his methods were even greater than his results, and this at a time when “theological subtilizing” was the only passport to reputation for scholarship.

It was Avicenna, the Arabian, who perhaps first announced substantially the modern theory of geology, accounting for changes in the earth’s surface by suggesting a stone-making force, but the presence of fossils in the rocks had been always a thorn in the sides of the theologians. It was Leonardo da Vinci, that

versatile genius in science and art, who, previous to Harvey's generation, suggested true notions as to the origin of fossils, while, in Harvey's time, Bernard Palissy, another artist, vehemently contended for their correctness. Still, even at Harvey's death, neither geology nor paleontology had come anywhere near scientific accuracy.

The *Accademia dei Lyncei*, so-called from its seal, which bore the image of a fox, was founded in Rome in 1603. In France The Academy of Science was not founded until 1665, in Germany The Society of Naturalists and Physicians in 1652, and the British Royal Society in 1665.

In matters of general interest it may be worth while to say that in architecture the general style of The Renaissance was changed for the more substantial Barocco, while the more formal and limited style of church music had given away to musical drama, i. e., opera, albeit in very crude form. The first newspaper had appeared at Antwerp in 1605, the first German paper being published in Frankfort in 1615, and The London Weekly News making its first appearance in 1620. Tobacco, which had been brought over by Raleigh in 1560, had come into quite general use, while coffee, tea and chocolate had gained in public esteem. When coffee was first introduced in England it sold for about \$28 a pound. The first coffee house appears to have been established in Constantinople, in the middle of the 16th century, while the first coffee house in London was not opened until a century later.

The barbers still retained their ascendancy, and the bath keepers had scarcely lost their position next to the barbers. It was not until Harvey had reached a ripe age that the barbers were required in Germany to pass an examination, in which they had to prove not only their knowledge but the legitimacy of their birth, and the fact that they had studied for three years and had worked for three years more as apprentices.

Anatomy was studied quite generally, sometimes upon human bodies. A dissecting room had been established in Dresden in 1617, in which stuffed bears, at that time a great rarity, were preserved with other curiosities. In 1623 Rolfink, at Jena, arranged for public dissection upon the bodies of all executed malefactors, delegates being present thereat from various other institutions. It is worth while to mention that in Frankfort, for instance, during the expiration of 65 years, but seven dissections were made, and that these were always accompanied by a celebration which lasted several days. Vienna did not possess a skeleton in 1668, and Strassburg did not have one until 1671. Yet it is of interest to remember that the anatomical plates, like those often published

today, which are meant to be lifted off in layers, existed even at this period. On the other hand, botanical gardens and chemical laboratories existed in several of the universities,—in Strassburg, for instance, in 1619,—in Oxford in 1622.

Fabricius Hildanus, the father of German surgery, or, as he has been sometimes called, the Ambroise Paré, of Germany, was also a contemporary of Harvey's. His real name was Fabry and he was born in Hilden, but he latinized his name into that form usually adopted today.

Scultetus was another famous surgeon of the same period.

William Gilbert, 1540-1603, had been the talented physician of Queen Elizabeth, and was among the first to study the experimental method. With the appearance of his book upon the magnet, in 1600, began the science of electricity and magnetism. He was the first to teach the fact that the earth itself was a great magnet and he distinguished between magnetic and electric reactions. Later the great Dutch anatomist, Ruysch, afforded corroboration of Harvey's views by another method, when he invented and practised those beautiful minute injections of the vascular system which made him so famous, and who built up that great collection of specimens which Peter the Great bought for Russia at an expense of about \$75,000.

Contemporary with Harvey also was Swammerdam, one of the most versatile men of his time, famous as naturalist, savant, physiologist, linguist and poet. It was during the fifteenth century that astronomy began to assume an importance and degree of accuracy never hitherto known. This was due very largely to the independence of thought and the researches of Copernicus, who was born in Cremona in 1477, and who studied medicine in Krakau and astronomy in Vienna. He lived to the age of 70 and was the real father of the heliocentric theory, now known as the Copernician system, which he substituted for the previous Ptolemaic theory, thus reversing the ancient idea that the sun circled about the earth. Copernicus demonstrated the phases of the moon, but his opponents claimed that if this doctrine were true Venus would exhibit the same phenomena; to which he replied that it was true, though he knew not what to say to these objections, but that God was good and would in time furnish answer to them. It was Galileo's crude telescope which, in Harvey's younger day, in 1611, furnished this answer and revealed the phases of Venus. To illustrate how the views of Copernicus were received we might add here that Martin Luther paid his compliment to him by declaring that Copernicus was a fool who wished to stand astronomy upon its head.

Copernicus was succeeded by Galileo, who was born in 1554 in Piza, and died 1642. He may be called the creator of dynamic astronomy and mechanics, as well as one of the most brilliant exponents of experimental and inductive reasoning. He was of noble birth and was, in fact, the torch bearer of physics at the period of The Renaissance. He gave up speculation and substituted for it the habit of observation, reaping a large harvest of surprising facts, any one of which might have immortalized him. He not only established the movements of the earth on its own axis as well as around the sun, which Copernicus had shown, but he discovered the weight of the atmosphere and first calculated the law of gravity. He and his successors were governed always by that aphorism which is today as true as ever: "Experience is deceptive and judgment difficult."

In 1615 when he was before The Inquisition at Rome, and when its theologians had examined statements extracted from his letters, they solemnly rendered their decision in these words: "The first proposition that the sun is the centre and does not revolve about the earth is foolish, absurd, false in theology and heretical, because expressly contrary to The Holy Scripture. The second proposition that the earth is not the centre, but revolves about the sun, is absurd, false in philosophy and, from a theological point of view, at least, opposed to the true faith." This for a pronunciamiento from the *infallible* Church!

Galileo and Bruno have by some writers both been made to stand in an unpleasant light because of their recantation or shifting position before The Inquisition. Bruno was the greatest philosopher and sceptic of the latter part of the 16th century, and had outlined, withal somewhat vaguely, that which is now known as the nebular hypothesis. He was murdered by The Inquisition in 1600, and the views which he enunciated seem to have been buried with him, not to reappear until long after his sad fate had been consummated. He had, for instance, contended for the truths of the Copernican doctrine, but it was not until ten years after his martyrdom that Galileo proved it with his telescope. That both these great men yielded in some respects to the influences of The Inquisition and renounced some of their scientific "heresies" is largely to be excused by the fact that they were both old, broken in health from the sufferings which they had endured, as well as from their disappointments, and that they had been, under these circumstances, handed over to that Inquisition which knew no mercy. Galileo could well remember the *auto da fê* in the Piazza dei Fiore, in Rome, the scene of Bruno's martyrdom, as well as the tragic end of many another who had dared to have the courage of his convictions. Let us, then, not judge him harshly, but be

grateful even that the enormous power of The Inquisition did not and could not suppress the truth.

Galileo's discovery of the satellites of Jupiter, the rings of Saturn, his experiments with the pendulum, his construction of the telescope, as well as of the thermometer, and many other deeds, have stamped him as one of the great figures in the history of progress and science. It is most interesting to note that this contemporary of Harvey's like himself, was given to induction obtained from experimental studies. Another great astronomical light of Harvey's time was Keppler, who was driven from one place to another by religious fanaticism, until he ended his life in 1630. It was he who formulated the great principle which underlies the motions of the planets, and who gave to the world his so-called "laws," which so materially advanced the science of astronomy. It was he who really discovered that comet which was later given Halley's name, whose periodic return he first foretold.

Such was the spirit of the times in which Harvey lived, and such the influences which surrounded his teachers before him and himself in turn. It makes a long preface to a consideration of what Harvey himself accomplished, but it is not without its interest because men and their works must be judged largely by their environment. Now, to speak more particularly of Harvey himself, and what was known of the circulation when he undertook his investigations.

The liver had been considered, from time immemorial, as the principal factor in the production and movement of the blood. The ancients supposed that here the veins took their origin and that through them the blood flowed to all parts of the body, returning to its source by an undulating movement or series of alternate waves. The arteries had been supposed to contain only vital spirits, whose great reservoir was the heart, although Erasistratus had admitted that in certain cases blood might escape into the arterial channels. Later Galen showed that the arteries always contained blood, and he knew that blood was poured into the right side of the heart by the great veins, but believed that only a little of it passed from the right ventricle into the lungs, the greater part of it passing through hypothetical pores in the septum and thus into the left ventricle. This opinion, like Galen's in other respects, remained unchanged until the middle of the 16th century. It was also known that valves existed within the veins, and that if an artery were tied on a living animal blood would cease to flow and pulsation be checked below the ligature, while if a vein were tied it shrunk above the ligature and became distended below.

Three men before Harvey's time came very near to discovering the secret that made him famous ; in fact, they made such advances

on what was already known that history should accord them a distinguished place. One was *Columbus*, who was born at Cremona in 1490, and died in 1559. He was first a pupil and prospector and then a friend of Vesalius, the great anatomist. Later he succeeded him at The University of Padua and unfortunately, after gaining his position, ungratefully turned upon his old teacher. He was, however, for his day a good anatomist and especially a good osteologist. It was he who first demonstrated experimentally that blood passes through the lungs into the pulmonary veins and that the latter connect with the left ventricle. He thus practically established the fact of the lesser circulation. He suffered, however, as did Servetus, from the prevailing notion that spirits and blood were mixed together. From Padua Columbus went to Pisa, and then to Rome. He wrote with elegance and correctness of style and even described the vessels which penetrate the bone cells, the ossicles of the ear, the minute anatomy of the teeth, the ventricles of the larynx, as well as those valves which prevent the return of blood from the lungs to the heart. In fact, he narrowly missed the significance of the actual facts of the case, simply failing in his final analysis and assembling of those facts which he had already demonstrated.

Cesalpinus, who lived a little later, came still nearer the mark, having accepted the teachings of Columbus regarding the course of the blood through the lungs. He added that the ultimate arterial branches connect with those of the veins, and he taught that blood and vital spirits, from which the ancients could never separate themselves, passed from the arteries into the veins during sleep, as was demonstrated by the swelling of the veins and the diminution of the pulse at that time.

A little later came *Michael Servetus*, who figures principally in history as a theologian and a victim of theologians, since he perished a martyr to Calvin's jealousy. He was, in effect, a wisely and widely educated man who did a great deal for science, one of the offences attributed to him being an edition of Ptolemy's geography, in which Judea was described as a barren and inhospitable land instead of one "flowing with milk and honey." This simple statement of a geographical fact was made a tremendous weapon of offence by Calvin, who replied that even if Servetus had only quoted from Ptolemy and, although there were ample geographical proofs, it nevertheless "unnecessarily inculpated Moses and grievously outraged The Holy Ghost." Servetus dared to deny the passage of the blood through the septum of the heart, and contended that that which comes into the right side was distributed to the lung and returned to the left ventricle. He published his views, however, in a religious treatise on Errors con-

cerning The Trinity, a most unfortunate place in which to inject such an important fact, since it gave his enemies a still greater opportunity to vent and ventilate their spleen. Had he been able to leave out that notion of vital spirits, which prevailed with all his predecessors, he might actually have made the great discovery left for Harvey to enunciate. I have not been able to refer to original documents in this matter, but it is claimed by some that his description of the circulation was contained in another religious work concerning the Restitution of Christianity, which was printed in Nuremburg in 1790.

Such was the actual state of knowledge concerning the movements of the blood and the functions of the heart when Harvey published his great work. It behooves us now to proceed with a short account of Harvey's own life and researches.

William Harvey was born at Folkstone on the first of April, 1578. He was the eldest son of a prosperous merchant who raised a large family and who occupied the highest positions of honor in his own town. The son William was born to his second wife, by whom he had seven sons and two daughters. All of these children were helped to remunerative or honorable positions. They became merchants or politicians or secured prominence in some way, but William was the only one to study medicine. He was sent to the King's school at Canterbury, in 1588, and he was admitted at Caius in Cambridge in 1593, where he graduated in arts in 1597. The following year he went to Padua, which then had one of the greatest medical schools of the time, and he obtained his medical diploma in 1602, when twenty-four years of age. Returning to England he received a doctor's degree at Cambridge, and shortly afterward married a daughter of a London physician and entered upon the practice of medicine in London.

In the great city his practice as a physician seems to have been from the outset successful, and his knowledge and ability procured him various valuable appointments. He was made a Fellow of The College of Physicians in 1607. This Royal College of Physicians was given a grant of incorporation by Henry VIII in 1518, at the intercession of Chambers, Linacre and Ferdinand Victoria, the King's Physicians, it being under the patronage of Cardinal Woolsey. The first meetings were held at Linacre's house which he bequeathed to the corporation at his death. Until this College was founded practitioners of medicine were licensed to practise by the Bishop of London or by the Dean of St. Paul's.

A few years later Harvey was appointed Physician-Extraordinary to King James I, and later yet, after the publication of his great treatise and its dedication to the King, he was made Physician-in-Ordinary to Charles I, whom he attended during the Civil Wars.

It must have been about 1615 when Harvey first began expounding his views on the circulation of the blood, during lectures which were delivered at The College of Physicians, but it was not until thirteen years later, i. e., in 1628, that his great work *DE MOTU CORDIS* was published in Latin, as was customary among scholars, and at Frankfort-on-the-Main, since that was the great center of the book publishing trade at that time.

The treatise was dedicated to King Charles I, in a manner which to us would seem servile, and yet which was according to a custom followed by nearly all of the scholars of the day, who desired to attract not only the attention of royalty, but, in most instances, their benevolent assistance. It is worth while to quote at this point the first sentence or two of his dedication:

"To the
Most Serene and Invincible
CHARLES,
of Great Britain, France and Ireland,
KING: DEFENDER of the FAITH,
Most Serene King,

"The heart of animals is the basis of their life, the principle of the whole, the Sun of their Microcosm, that upon which all movement depends, from which all strength proceeds. The King in like manner is the basis of his Kingdom, the Sun of his World, the heart of the Commonwealth, whence all power derives, all grace appears. What I have here written of the movements of the heart I am the more emboldened to present to your Majesty, according to the Custom of the present age, because nearly all things human are done after human examples and many things in the King are after the pattern of the heart."

The dedication was followed by a Proemium which one may hardly read today without emotion. In it he sets forth the mystery that has surrounded the subject of the motion and function of the heart, as well as the attendant difficulties of the subject, speaking of his own early despair that he would ever be able to clear up the subject. He even said that at one time he found the matter so beset with difficulties that he was inclined to agree with Fracastorius "that the movements of the heart and their purpose could be comprehended by God alone." Only later was this despair dispelled by a suggestion when, as he says: "I began to think whether there might not be a movement in a circle" and when thus the truth dawned fully upon him.

We shall have to speak later of the opposition provoked by the appearance of this work and its almost general rejection. It is perhaps, however, but just to those who disputed Harvey's dis-

coveries to recall that no complete and actual demonstration of the actual circulation was possible at that time, nor for many years after, and until the introduction of the microscope, the common magnifying glass of that day being the only lens in use. It remained for Malpighi to demonstrate the blood actually in circulation in the lung of a frog some three or four years after Harvey's death, in 1657. But Harvey lived long enough to see his views gain general acceptance, and though at first, and as the result of the opposition provoked by his publication, his practice fell off mightily, he later regained his professional position and rose to the highest eminence, being elected in 1654 to the Presidency of the College of Physicians. To this institution he proved a great benefactor, making considerable additions to the building after its destruction in The Great Fire of 1666 and its subsequent restoration. He also left a certain sum of money as a foundation for an annual oration, to be delivered in commemoration of those who had been great benefactors of the College. This oration is still regularly delivered on St. Luke's Day, i. e., the 18th of October, and is ordinarily known as the Harveian oration. In these orations more or less reference to Harvey's work and influence is always made.

This great man passed away on the 3d of June, 1657, within ten months of his eightieth birthday, thus affording a brilliant exception to the list of men who have rendered great service to the world and not lived long enough to see it appreciated.

As one reads Harvey's own words, the wonder ever grows that it should have remained for him, after the lapse of so many centuries, to not only call attention to what had been said by Galen but apparently forgotten by his successors, namely, that "the arteries contained blood and nothing but blood, and, consequently, neither spirits nor air, as may be readily gathered from experiments and reasonings," which he elsewhere furnishes. He furthermore shows how Galen demonstrated this by applying two ligatures upon an exposed artery at some distance from each other, and then opening the vessel itself in which nothing but blood could be found. He calls attention also to the result of ligation of one of the large vessels of an extremity, the inevitable result being just what we today know it must be, and the procedure terminating with gangrene of the limb.

Not long before Harvey's own publication, Fabricius, he of Aquapendente, had published a work on respiration, stating that, as the pulsation of the heart and arteries was insufficient for the ventilation and refrigeration of the blood, therefore were the lungs fashioned to surround the heart. Harvey showed how the arterial pulse and respiration could not serve the same ends, combating

the view generally held, that if the arteries were filled with air, a larger quantity of air penetrating when the pulse is large and full, it must come to pass that if one plunge into a bath of water or of oil when the pulse is strong and full it should forthwith become either smaller or much slower, since the surrounding fluid would render it either difficult or impossible for air to penetrate. He also called attention to the inconsistencies between this view and the arrangement of the prenatal circulation; also to the fact that marine animals, living in the depths of the sea, could under no circumstances take in or emit air by the movements of their arteries and beneath the infinite mass of waters, inasmuch as "to say that they absorb the air that is present in the water and emit their fumes into this medium, were to utter something very like a figment;" furthermore "when the windpipe is divided, air enters and returns through the wound by two opposite movements, but when an artery is divided blood escapes in one continuous stream and no air passes."

Discussing further the views which he stigmatized as so incongruous and mutually subversive that every one of them is justly brought under suspicion, he reverts again to the statements of Galen, calling attention to the fact that from a single divided artery the whole of the blood of the body may be withdrawn in the course of half an hour or less, and the inevitable consequences of such an act; also that when an artery is opened the blood is emptied with force and in jets, and that the impulse corresponds with that of the heart; again that in an aneurism the pulsation is the same as in other arteries, appealing for corroboration in this matter to the recent statements of Riolan, who later became his avowed enemy. Harvey also called attention to the fact that while ordinarily there was a seemingly fixed relation between respiration and pulse-rate, this might vary very much under certain circumstances, showing that respiration and circulation were two totally different processes. Harvey utilized also the results of his researches in comparative anatomy and physiology, for early in his work he calls attention to the fact that every animal which is unfurnished with lungs lacks a right ventricle.

In his Proemium he then proceeds to ask certain very pertinent questions which can only be briefly summarized in this place. He asks: First, why, inasmuch as the structure of both ventricles is practically identical, it should be imagined that their uses are different, and why, if tricuspid valves are placed at the entrance into the right ventricle and prove obstacles to the return of blood into the vena cava, and if similar valves are situated at the commencement of the pulmonary artery, preventing return of blood into the ventricle, then why, when similar valves are

found in connection with the other side of the heart, should we deny that they are there for the same purpose of preventing "here the egress" and "there the regurgitation of the blood?"

Secondly, he asks why, in view of the similarity of these structures, it should be said that things are arranged in the left ventricle for the egress and regress of spirits, and in the right ventricle for those of blood?

Thirdly, he enquires why, when one notes the resemblance between the passages and vessels connected with the opposite sides of the heart, one should regard one side as destined to a private purpose, namely, that of nourishing the lungs, the other to a more public function? Furthermore, he enquires, since the lungs are so near, and in continual movement, and the vessels supplying them of such dimensions, what can be the use of the pulse of the right ventricle, which he had often observed in the course of his experiments? He sums up his inability to accept the explanations previously offered with a phrase which reads rather strangely, even in original Latin: "*Deus bone! Quomodo tricuspides impediunt aëris egressum, non sanguinis.*" i. e., "Good God! how should the mitral valves prevent the regurgitation of air and not of blood?"

He then takes up the views of those who have believed that the blood oozed through the septum of the heart from the right to the left side by certain secret pores, and to them he replied "By Hercules, no such pores can be demonstrated, nor, in fact, do any such exist." Again, "Besides, if the blood could permeate the substance of the septum, or could be emptied from the ventricles, what use were there for the coronary artery and vein, branches of which proceed to the septum itself, to supply it with nourishment?"

Further on in the treatise Harvey sets forth his motives for writing, stating how greatly unsettled had become his mind in that he did not know what he himself should conclude nor what to believe from others. He says: "I was not surprised that Laurentius should have written that the movements of the heart were as perplexing as the flux and reflux of Euripus had appeared to Aristotle." He apologizes for the crime, as some of his friends considered it, that he should dare to depart from the precepts and opinions of all anatomists. He acknowledged that he took the step all the more willingly, seeing that Fabricius, who had accurately and learnedly delineated almost every one of the several parts of animals in a special work, had left the heart entirely untouched.

Passing more directly to the actual work of the heart, he shows that not only are the ventricles contracted by virtue of the muscular structure of their own walls, but further that those fibers or

bands, styled "Nerves" by Aristotle, that are so conspicuous in the ventricles of larger animals when they contract simultaneously, by an admirable adjustment, help to draw together all the internal surfaces as if with cords, thus expelling the charge of contained blood with force. Later on he says that if the pulmonary artery be opened, blood will be seen spurting forth from it, just as when any other artery is punctured, and that the same result follows division of the vessel which in fishes leads from the heart. He furnishes a very happy simile to prove that the pulses of the arteries are due to the impulses of the left ventricle by showing how, when one blows into a glove all of its fingers will be found to have become distended at one and the same time. He quotes Aristotle, who made no distinction between veins and arteries, but said that the blood of all animals palpitates within their vessels and by the pulse is sent everywhere simultaneously, all of this depending upon the heart.

It is in Chapter Five of the treatise that he gives, probably for the first time, an accurate published account of just what transpires with one complete cycle of cardiac activity. The passage need not be quoted here, but deserves to be read by everyone interested in the subject, as who should not be? One sentence, however, is worth quotation or, at least, a summary, as follows: "But if the divine Galen will here allow, as in other places he does, that all the arteries of the body arise from the great artery, and that this takes its origin from the heart; that all the vessels naturally contain and carry blood; that the three semilunar valves situated at the orifice of the aorta prevent the return of the blood into the heart, and that they were here for some important purpose, —I do not see how he can deny that the great artery is the very vessel to carry the blood, when it has attained its highest triumph of perfection, from the heart for distribution to all parts of the body."

His Chapter Six deals with the course by which blood is carried from the right into the left ventricle, and here one must admire the large number of experimental demonstrations which Harvey had undertaken upon all classes of animals, for he speaks even of that which occurs in small insects, whose circulation he had studied so far as he could with the simple lens. Furthermore he described the prenatal circulation, omitting practically nothing of that which is taught today, showing that in embryos, while the lungs are yet in a state of inaction, both ventricles of the heart are employed, as if they were but one, for the transmission of blood. In concluding this chapter he again states briefly the course of the blood, and promises to show, first, that this may be so and, then, to prove that it really is so.

His Chapter Seven is devoted to showing how the blood passes through the substance of the lungs from the right ventricle and then on into the pulmonary vein and left ventricle. He alludes to the multitude of doubters as belonging, as the poet had said, to that race of men who, when they will, assent full readily, and when they will not, by no matter of means; who, when their assent is wanted, fear, and when it is not, fear not to give it. A little later on he says: "As there are some who admit nothing unless upon authority, let them learn that the truth I am contending for can be confirmed from Galen's own words, namely, that not only may the blood be transmitted from the pulmonary artery into the pulmonary veins and then into the left ventricle of the heart, but that this is effected by the ceaseless pulsation of the heart and the movements of the lungs in breathing." He then shows how Galen explained the uses of the valves and the necessity for their existence, as well as the universal mutual anastomosis of the arteries with the veins, and that the heart is incessantly receiving and expelling blood by and from its ventricles, for which purpose it is furnished with four sets of valves, two for escape and two for inlet and their regulation.

Harvey then noted a well-known clinical fact, that the more frequent or forcible the pulsations, the more speedily might the body be deprived of its blood during hemorrhage, and that it thus happens that in fainting fits and the like, when the heart beats more languidly, hemorrhages are diminished and arrested. The balance of the book is practically devoted to further demonstration and corroboration of statements already made. A study of this work of Harvey's illustrates how much respect even he and his contemporaries still showed for the authority of Galen. It shows still further how nearly Galen came to the actual truth concerning the circulation. Had the latter not adopted too many of the notions of his predecessors concerning the nature of the soul (Anima) and the spirits (Pneuma) of man, he might himself have anticipated Harvey by a thousand years, and by such announcement of a great truth have set forward physiology by an equal period. Independent and original as Harvey showed himself, he seems to have failed to get away from the notion of the vapors and spiritual nature of the blood which he had inherited from the writings of Galen and many others. Nevertheless he also alludes to this same blood as alimentive and nutritive. We must not forget, however, that this was years before Priestly's discovery of oxygen and that Harvey had, like others, no notion of the actual purpose of the lungs, believing that the purification and revivification of the blood was the office of the heart itself.

Along with its other intrinsic merits Harvey's book possesses a clear and logical arrangement, the author first disposing of the

errors of antiquity, describing next the behavior of the heart in the living animal, showing its automatic pumplike structure, its alternate contractions and the other phenomena already alluded to, thus piling up facts one upon another in a manner which proved quite irresistible. The only thing that he missed was the ultimate connection between the veins and the arteries, i. e., the capillaries, which it remained for Malpighi to discover with the then new and novel microscope, which he did about 1657, showing the movements of the blood cells in the small vessels, and confirming the reality of that ultimate communication which had been held to exist. Malpighi discovered the blood corpuscles in 1665, but it remained for Leeuwenhoek of Delft, in 1690, by using an improved instrument to demonstrate to all observers the actual movements of the circulating blood in the living animal. One historian has said that with Harvey's overthrow of the old teachings regarding the importance of the liver and of the spirits in the heart fell the four fundamental humors and qualities, while Daremberg exclaims: "As in one of the days of the creation chaos disappeared and light was separated from darkness."

It remains now only to briefly consider how Harvey's great discovery was received. To quote the words of one writer: "So much care and circumspection in search for truth, so much modesty and firmness in its demonstration, so much clearness and method in the development of his ideas, should have prepossessed everyone in favor of the theory of Harvey; on the contrary, it caused a general stupefaction in the medical world and gave rise to great opposition.

During the quarter of a century which elapsed after Harvey's announcement there probably was not an anatomist nor physiologist of any prominence who did not take active part in the controversy engendered by it: even the philosopher Descartes was one of the first adherents of the doctrine of the circulation, which he corroborated by experiments of his own.

Two years after the appearance of Harvey's book appeared an attack, composed in fourteen days by one Primerose, a man of Scotch descent, born and educated in France, but practising at Hull, in which he pronounced the impossibilities of surpassing the ancients or improving on the work of Riolan, who already had written in opposition to Harvey, and who was the only one to whom the latter vouchsafed an answer. It was Riolan who procured a degree of the Faculty of Paris prohibiting the teaching of Harvey's doctrine. It was this same Riolan who combated with equal violence and obstinacy the other great discovery of the age, namely,—the circulation of the lymph.

One of the earliest and fiercest adversaries of Harvey's theory was Plempius, of Louvaine, who, however, gave way to the force

of argument and who finally publicly and voluntarily passed over to the ranks of its defenders in 1652, becoming one of Harvey's most enthusiastic advocates.

Harvey's conduct through the controversy was always of the most dignified character; in fact, he rarely ventured to reply in any way to his adversaries, believing in the ultimate triumph of the truths which he had enunciated. His only noteworthy reply was one addressed to Riolan, then Professor in the Paris Faculty and one of the greatest anatomists of his age, to whose opinion great value was always attached. Even in debating or arguing against him, Harvey always spoke of him with great deference, calling him repeatedly The Prince of Science. Riolan was, however, never converted, though whether he held to his previous position from obstinacy, from excess of respect for the ancients, or from envy and jealousy of his contemporary, is not sure.

Another peculiar spectacle was afforded by one Parisinus, who died in 1643, a physician in Venice, who, like Harvey, had been a pupil of Fabricius of Aquapendente, who had been stigmatized by Riolan as an ignoramus in anatomy, but who joined with others in declaring that he had seen the heart beat when perfectly bloodless, and that no beating of the heart and no sounds were to be heard as Harvey had affirmed.

With the later and more minute studies into the structure and function of the heart we are not here concerned. The endeavor has been rather to place before you the sentiments, the knowledge and the habits of thought of the men of Harvey's time, with the briefest possible epitome of what they knew, or rather of how little they knew, to account for this later slavish adherence to authority by unwillingness to reason independently or to observe natural phenomena intelligently, still less to experiment with them. It is, then, rather the brief history of an epochal discovery than an effort to trace out its far-reaching consequences that I have endeavored to give.

Here must close an account which perhaps has been to you tedious, and yet which is really brief, of Harvey's life and labors. He lived to see his views generally accepted and to enjoy his own triumph, a pleasure not attained by many great inventors or discoverers. Lessons of great importance may be gathered from a more careful study of this great historical epoch, but they must be left to your own powers of reasoning rather than to what I may add here. I commend it to you as a fertile source of inspiration, and a line of research worthy of both admiration and imitation. Few men have rendered greater service to the world by the shedding of blood than did Harvey in his innocent and wonderful studies of its natural movement. Perhaps it might

be said of him that he as the first man to show that "blood will tell." What he made it tell has been thus briefly told to you.

I know not how I may better close this account than by quoting the concluding words of his famous book, and especially repeating the lines which he has quoted from some Latin author whom I have not been able to identify. His paragraph and his quotation are as follows:

"Finally, if any use or benefit to this department of the republic of letters should accrue from my labors, it will, perhaps, be allowed that I have not lived idly, and, as the old man in the comedy says:

'For never yet hath anyone attained
To such perfection, but that time, and place,
And use, have brought addition to his knowledge;
Or made correction, or admonished him,
That he was ignorant of much which he
Had thought he knew; or led him to reject
What he had once esteemed of highest price.'

Some of the Leading Men and Events in the History of American Medicine.¹

By FRIDOLIN THOMA, Buffalo, N. Y.

THE first physician or surgeon of whom we have an authentic record of having come to America was one John Wolton, or Wooten, who came to Jamestown in 1607 with Captain John Smith—a man no doubt of high heart and vigor, a worthy predecessor of that long line of resourceful and able men who have honored American medicine. Besides Wolton, the surgeon, other doctors came to these shores about the same time, one being Dr. Walter Russell, perhaps a man of science and holding a degree. In the same year, 1608, Anthony Bagnall, chirurgion, sailed with Captain Smith upon the Chesapeake, but of him, Russell and Wolton we know little.

In 1610 came Lawrence Bohun and in 1624 John Pott, who was temporary Governor in 1628. In 1629 the early Virginia doctors went before the legislature to obtain laws regulating medical practice. Throughout the colonies quackery flourished with little let or hinderance. The great distances, the infrequent needs of the people, the loose methods and credulity of most of the regularly licensed physicians, gave great opportunities to irregular practitioners.

The first law, passed on October 21, 1639, was "an act to compel physicians and surgeons to declare on oath the value of their

1. Presidential Address to the Alumni Association, Medical Department University of Buffalo, at its thirty-first annual meeting, May 29, 1906.

medicines." In 1620 Samuel Fuller came to Plymouth; he was the first physician in New England and for some time the only one, and he brought a small stock of drugs with him. The first winter in Plymouth needs no telling here, but we must believe that there was enough practice for Deacon Fuller and his faithful wife. Already grown and matured he practised thirteen years and then died. His wife was taught his work in a rough way, to act as a midwife, and both together served their neighbors well.

John Winthrop, Jr., was born in 1605 and became Governor of the New Haven Colony in 1657, a contemporary of Harvey and probably studied with that master before coming here, being no doubt of good repute in science for he became a founder of the Royal Society. It is hard to say what may have been the medical value and service of Winthrop to the colonists, but it would seem that, like Endicott and Winslow, the latter of whom is also reckoned among the doctors, he was rather a board of health and general supervisor than a constant, active practitioner.

One cannot tell the story of American Medicine as a whole because there was no whole. There were, however, four principal medical centers before the revolution, and if we count Virginia and Maryland there were six; but the principal centers were naturally the leading seaboard cities,—New York, Philadelphia, Boston, and Charleston.

In 1637 came M. La Montagne, the first New York physician, and as of most of those early physicians we know little of him. He wrote nothing medical of moment but followed the best practice of his time. He was described as learned and skilful. La Montagne was, however, not alone in Manhattan for, the year after his coming, there arrived Gerret Schult and Hans Kierstede, surgeons. Then there was Samuel Megapolensis who was born in this country and graduated in 1657 an M.D. of Utrecht. There were a few others,—Abraham Staats, Vanevenger L'Orange, J. Hughes, Du Park and Johannes Kerfbyle, who is on record as having made a medico-legal autopsy.

In 1682 a Welshman, Thomas Wynne, came to Philadelphia, who it is said was the most thoroughly equipped and learned physician that until then had visited America. Most of these early Philadelphia physicians were Welshmen and many were kinsmen. Two of the most notable advances in the science of medicine which have been made in this country originated in Boston; the first was the introduction of inoculation for smallpox; the other the introduction of ether anesthesia, and both received their initial impulse from men not strictly within the ranks of physicians.

June 21, 1721, must be marked as the day of greatest import in the history of American Medicine up to that time, and very

few days equal it since, when Zabdiel Boylston inoculated his thirteen-year-old son and his two negro servants for smallpox. Dr. Boylston was born in Brookline, Mass., in 1635. His father was Thomas Boylston, an Englishman with an M.D. degree from Oxford. He studied with his father and also with John Cutter, a man of some local reputation. It does not appear that he received the doctor's degree but he was the first native American who was made a member of the Royal Society.

Cadwallader Colden who came to Philadelphia in 1710, was graduated an M.D. from Edinburgh when twenty years old. After a residence here of five years he went to London to improve his knowledge; in 1716 he returned to America and in 1718 he took up a permanent residence in New York. He was noted for his prolific writings, and also held many public offices—Lieutenant Governor, Surveyor General of the Province, Master in Chancery and a member of the Governor's Council.

Thomas Cadwallader was born in Philadelphia, the son of a prominent physician, well educated for his time and perhaps more noted for his broad humanities. He studied under Cheselden and on his return from London established by request a class in practical dissections, demonstrating anatomy as well as performing autopsies for his less well-informed colleagues. In the same year, 1750, a criminal named Hermanus Carroll was executed for murder in New York City and his body was dissected by John Bard and Peter Middleton, for the instruction of the young men then engaged in the study of medicine. This is the first essay made in the colonies for the purpose of acquiring medical knowledge of which we have any record.

While the eastern and middle colonies were producing their numerous practitioners and a few better known to us, South Carolina was honored by a group of five men who deserve special notice. They were Chalmers, Linnig, Garden, Moulton, and Bull; not that their contributions were of great permanent value, but because they were men of sound understanding and unusual cultivation, who seemed to have appreciated that progress is not only attained by the brilliant discoveries of the few but by the obscure toil of the many.

Thomas Bond was born in 1712 in Maryland, was in comfortable circumstances and received an excellent education. He was not graduated in arts but early began his medical studies in the office of a Dr. Hamilton and, after having passed some six years under his tutelage, he went to Europe for a broader learning. Bond came home in 1734 and settled in Philadelphia. In 1751 he launched his great project of establishing a municipal hospital. He enlisted the aid of that vigorous philosopher, Ben-

jamin Franklin, who at once saw the value of the proposal and put it before the community. After the sum of 2,000 pounds had been raised by public subscription and another 2,000 pounds added by the state legislature of Pennsylvania, the design was carried into execution. A house was rented on the south side of Market Street (then High) below Seventh and was ready for patients by February, 1752. Rules were adopted and signed by Benjamin Franklin, clerk, by the Speaker of the Assembly and by the Attorney General. The first staff consisted of Thomas Bond, Lloyd Zachary, and Phineas Bond, whose services were rendered gratis. There was also a consulting staff composed of Cadwallader, Graeme Moore and Redman. So the Pennsylvania Hospital started out humbly enough but in competent hands, and after four years of such existence the corner stone of the present ancient building was laid, Benjamin Franklin writing the inscription:

In the year of Christ
1755

George the Second Happily Reigning
(For he sought the happiness of his people)
Philadelphia flourishing,
(For its inhabitants were public spirited,)
This Building

By the bounty of the Government and of many private persons
Was piously founded

For the relief of the sick and the miserable.
May the God of Mercies bless the undertaking.

The first three great names connected with its first half century are those of Franklin, Bond and Rush, and it continues today a splendid monument to their wisdom, foresight and ability. Benjamin Rush has been called the father of American medicine, but we must call John Morgan its grandfather. John Morgan was born in Philadelphia, in 1736, and received the degree A.B. from the College of Philadelphia in 1757 with the first class that graduated from that institution. He studied medicine with Dr. Redman and served in the war against the French. In 1760 he resigned from the army and went to Europe to pursue his medical studies. He passed several months with William Hunter, studying anatomy and surgery, then went to Edinburgh where he became the friend and pupil of Cullen, the Munros, Rutherford, Wyth and Hope, where he spent two years and was graduated a doctor of medicine from the University. Thence he repaired to Paris, studied under Sue and was admitted to the Academy of Surgery. He also traveled to Holland and Italy where he won the friendship of Morgagni. After all his traveling he re-

turned to London where he was made a Fellow of the Royal Society, as well as an M.C.P. of Edinburgh. During his travels he conceived the idea of forming a medical school and upon his return to America he set to work to establish one, in which project he was ably seconded and assisted by his friend and townsman, William Shippen, Jr. On the 30th day of May, 1765, Dr. Morgan delivered his "Discourse upon the Institution of Medical Schools in America." He had written this when in Paris and it had undergone a careful scrutiny by Dr. Fothergil, Dr. Hunter and Dr. Watson of London. In it he recommended a very comprehensive preliminary education preparatory to the study of medicine.

It would not be fair to assume that Morgan was the only promoter of the scheme; mention has already been made of William Shippen, Jr. The two were born in the same year, 1736. Shippen came of a well-known medical family, his father being William Shippen, Sr., who was a prominent practitioner of Philadelphia. He enjoyed a liberal education, was graduated from the College of New Jersey, as Princeton was then called, and after studying some time with his father he, too, went to Europe and enjoyed the instructions of John Hunter in Anatomy and William Hunter and McKenzie in midwifery. He received his degree of M.D. from the University of Edinburgh in 1761, returned to this country in 1762, and in March of the same year began the delivery of a series of lectures on midwifery, the best special course ever given in this country up to that time.

William Hunter, of Rhode Island, a relative of the famous Scotch Hunters, and other energetic men had done similar work, useful though spasmodic. Thus it came about that in 1765 these two young men, then but 29 years old, approached the great subject with almost equal preparation, vigor and enthusiasm. Their fitness was so apparent that the trustees of the college arranged to launch the medical school. Morgan and Shippen were at once chosen for the two important chairs of theory and practice of medicine, and of anatomy and surgery respectively. These two men controlled for many years the policy of the school. The college was to confer two degrees in medicine, the bachelor's and the doctor's, although in the next generation the bachelor's degree was abandoned. Two other men were now appointed to the little staff—Adam Kuhn, professor of materia medica and botany, and Benjamin Rush, professor of chemistry. Adam Kuhn was born in Philadelphia in 1743, first studied medicine with his father, and in 1761 went abroad and studied medicine at the University of Upsal in Sweden, where he also pursued the science of botany under the great Linneaus. Subsequently Kuhn studied medicine

in London, finally going to Edinburgh, from which university he received the degree of M.D. in 1767. He returned to America in 1768, lectured on botany in May of that year, and lectured for twenty years on *materia medica*.

Benjamin Rush was born on his father's farm a few miles from Philadelphia in 1745. He obtained the degree of A.B. from Princeton in 1760, before he was fifteen years old, and at once began the study of medicine, serving as an apprentice to John Redman. He went to Edinburgh in 1766 and received from that university the degree of M.D. in 1768, returned to Philadelphia in August, 1769, and was elected to the chair of chemistry. In 1771 the degree of M.D. was conferred upon Jonathan Elmer, Jonathan Potts, James Tilton and Nicholas Way.

In 1768 the medical school of Kings College was established in the city of New York. The chairs were held by Samuel Clossy, anatomy; John Jones, surgery; Peter Middleton, physiology and pathology; James Smith, *materia medica* and chemistry; John V. B. Tennant, midwifery; and Samuel Bard, theory and practice of medicine. This school was the first to confer the M.D. degree in this country—namely, in 1770, upon Robert Tucker, and in May, 1771, upon Samuel Kissam.

In connection with the founding of these two schools it is interesting to note that Morgan and Middleton, the representative initial spokesmen, placed the highest value upon a broad preliminary education, an equipment which we now, after a lapse of more than a century and a quarter, are beginning to demand of the matriculates in our leading schools.

In 1807 the New York University started a school of its own and gave it the name now famous,—the College of Physicians and Surgeons,—but the new institution soon got into trouble, dissensions in the faculty soon brought it to a low ebb and the lack of consistent courses so discouraged the students that there was a great falling off in their numbers. The fact was that there was not enough clinical material nor teachers in New York at that time. The only remedy lay in a union and that was accomplished in 1811. Samuel Bard was made president and an efficient and congenial faculty was selected from the rival staffs and the College of Physicians and Surgeons started out on its long and successful career.

In New York the medical college preceded the hospital and to supply the lack Samuel Bard made such an eloquent plea for the importance and necessity of a hospital that it was at once taken in hand by the citizens, Governor Sir Henry Moore heading the list and urging it upon the legislature. Dr. Fothergil, of London, with the aid of Sir William Duncan, also raised considerable money.

In 1770 Drs. Bard, Jones and Middleton petitioned their friend Cadwallader Colden, who was then Lieutenant Governor, to further this great object of his professional colleagues, and he granted a charter of incorporation under the title "The Society of the Hospital of the City of New York," and early in 1775 a fine stone building was practically completed, when it took fire and burned to the ground. Again more money was raised and another building was built, and the first use it was put to was the holding of the Provincial Congress in it in 1776.

In 1783 the Harvard Medical School was started on its long and honorable career by John Warren, professor of anatomy and surgery; Aaron Dexter, professor of materia medica and chemistry, and Benjamin Waterhouse, professor of theory and practice of medicine. The lectures were given in Cambridge in the college buildings until 1810, when the medical school was transferred to Boston. The first student upon whom the M.D. degree was conferred was John Fleet in 1788, and in 1789 there were two graduates, Peter DeSales Lattreire and William Pearsons, and in 1790, Nathan Smith.

In 1798 the medical department of Dartmouth College was established largely through the efforts of Nathan Smith, who was for many years its only professor. Eighty years ago he was a tower of strength for New England. He did an ovariectomy, twelve years after McDowell, but he was ignorant of his predecessor.

The first association of physicians into a society of which there is any record in America, was in Boston. It existed from 1735 until at least 1741, when it disappeared in the sands of time. The oldest of still existing medical societies is The Medical Society of New Jersey. The first of their meetings was held at a Mr. Duff's house in the city of New Brunswick on Wednesday, July 23, 1766, at which time and place the constitution and regulations were adopted.

The Medical Society of the County of New York was established in 1794 and continued in existence until 1806, when it became the Medical Society of the State of New York.

According to the Universal Asylum and Columbian Magazine for April, 1790, we find that the American Medical Society was established in the year 1773 with the following officers:

President, William Shippen; Vice-president, William B. Duffield; treasurer and perpetual secretary, Henry Stuber; annual secretary, John Baldwin. The first American medical periodical was published by Elihu Hubbard Smith,—*"The New York Medical Repository."*

In the Centennial year of 1876 there was published in Philadelphia a little work entitled "A Century of American Medicine." The essay on surgery was written by Samuel D. Gross and in it he says:

"Finally, let it not be supposed from what precedes that the American surgeon is a mere operator; if he ranks high in this particular he ranks high also as a therapist. Nowhere, it may be safely asserted, are the great principles of surgery better taught or better understood than they are in this country. As a general practitioner, skilled in diagnosis, and in the art of prescribing, it is no presumption to affirm that he has no superior. If as a body we are deficient in any particular, it is in the more refined and subtle portions of our studies, studies which are after all of no essential practical importance, and which, it is not too much to say, will in due time receive their just proportions."

If, eighty years ago, one had asked the name of the best known and greatest living American surgeon, the reply would have been Dr. Physick. Phillip Syng Physick was born in Philadelphia July 7, 1768 and died there on December 15, 1837. He was graduated a bachelor of arts from the University of the State of Pennsylvania in 1785 at the age of seventeen. He was a student in Adam Kuhn's office, and in 1789 his father took him to London, where he had the good fortune to be taken into the family of John Hunter. He was made house surgeon at St. George's Hospital; he also studied in Edinburgh, where he received the M.D. degree in 1792, returning to America in the same year. In 1794 he was elected surgeon to the Pennsylvania Hospital. In 1800 he was asked to lecture on surgery to certain students in the University school, and became professor of surgery in 1805. Physick was professor of surgery for thirteen years. His lectures were marked for sound statements, concise observations, and conclusions so inevitable that a great impression was made. He was widely famous as a brilliant hospital operator and clinician and also was an able mechanic in orthopedic surgery. But it was lithotomy that gave him his greatest fame. In 1818 his nephew, John Syng Dorsey, died. He had been professor of anatomy and was most successful. After his nephew's death, Physick was persuaded to give up teaching surgery and to take the chair of anatomy, in which he was but a feeble reed. He clung to the uncongenial work for twelve years before he resigned. He died, as stated before, December 15, 1837, and was buried as the "Father of American Surgery."

From Physick we turn at once to a man of whom most truly it must be said that he was not without honor, save in his own generation,—Ephraim McDowell. Ephraim McDowell was born in Rockbridge county, Virginia, November 11, 1771. In 1782

his father, Samuel McDowell, was appointed as a commissioner to adjust the western land grants allotted by Virginia to its veterans, out of its Kentucky territory, and he settled in Danville, was appointed judge of the District Court and lived there until his death in 1817, after his son had done his greatest work. It was in that vigorous frontier life that young McDowell grew up, getting what rambling education was to be found in the classical seminary of Messrs. Worley and James, who migrated between Bardstown and Georgetown. He did not settle down to serious work until he was nearly a man grown. When twenty years old he decided to study some profession and seeing the opportunity of a good doctor in his own rapidly growing state decided on medicine. There being no competent preceptor near Danville he went back to his old home in Virginia and entered the family of a Dr. Humphreys in Staunton, about thirty miles from his native place. He stayed there two years when his father sent him to Edinburgh. Gregory, Black and Munro the second were the great men then, but John Bell was his hero. Bell was not as yet giving his lectures on surgery at the university, but McDowell took one of his private courses and rejoiced in the fact the rest of his life. In 1795 he had to return home without completing his course and without the doctorate degree. He settled in Danville at once and lived there ever after, from the outset well-nigh swamped with a great burden of practice.

In 1809, when thirty-eight years old and fourteen years in practice, McDowell performed ovariectomy. It had never been done before and for centuries surgeons had regarded it as impossible, but out of the American wilderness came the pioneer to show the way. In the autumn of 1809 McDowell was consulted by a Mrs. Crawford, the subject of a large ovarian cyst. Mrs. Crawford drove sixty miles to McDowell's and was operated upon there. No preparation of the patient was made beyond giving her a large dose of opium. The account runs thus: "The patient being on the table I marked with a pen the course of the incision to be made, desiring him (nephew James) to make the external opening, which in part he did. I then took the knife and completed the operation as stated in the Medical Repository. Although the termination of this case was most flattering, yet I was more ready to attribute it to accident than to any skill or judgment of my own, but it emboldened me to undertake similar cases and not until I had operated three times, all of which were successful, did I publish anything on this subject. I then thought it due to my own reputation and to suffering humanity to throw all the light which I possessed upon the diseased ovaria."

He did thirteen ovariectomies in all, eight of which recovered. McDowell performed numerous other operations and he paid

much attention to the subject of hernia, President Polk early in life being one of his subjects and one of those who were permanently cured by his skill. McDowell was not wealthy, his estate being estimated at from \$40,000 to \$50,000 at the time of his death. He expired at Danville, June 20, 1830. His disease was inflammatory fever, terminating his life on the fourteenth day of the attack, in the fifty-ninth year of his age,—and the remains of Kentucky's first great surgeon repose in the family burial ground of Governor Shelby, five miles from Danville. His tombstone, a plain slab of marble, bears the simple inscription of his name, Ephraim McDowell.¹

Valentine Mott was the great surgeon of New York seventy-five years ago. He was born at Glen Cove, L. I., August 20, 1785. He was the first man to ligate the innominate artery on the living, in the year 1818. The patient was one Michael Bateman, a seaman from Massachusetts. The man lived twenty-five days after the operation and then died of recurring hemorrhages. In 1827 he successfully tied the common iliac artery for aneurism, the second case ever so operated upon, and Mott's patient was the first to survive. The former and unsuccessful case was in the hands of another brilliant American surgeon, Dr. William Gibson, of Baltimore.

John Collins Warren is another surgeon connected with an epoch in American medicine. He was the son of John Warren, who founded the Harvard Medical School. It was he who allowed his name and position to stand sponsor for the first public use of ether anesthesia in the Massachusetts General Hospital, on Friday, October 16, 1846, when he operated upon one Gilbert Abbott for the removal of a congenital but superficial vascular tumor just below the jaw on the left side of the neck, the anesthetic being given by Dr. Morton, its discoverer.

Benjamin Winslow Dudley was born in Spottsylvania county, Virginia, on April 12, 1785, the son of a Baptist minister. The family moved into the neighborhood of Lexington, Ky., while the son was still a child. He began his professional studies in the family of an excellent general practitioner, Frederick Ridgely, and in 1804 went to Philadelphia where he graduated two years later. He went back to Lexington in 1806 and, after having made some money, loaded a flat-boat with a collection of sundries, and drifted down to New Orleans where he did some sharp trading, investing his all in flour, and sailed boldly for Gibraltar. He sold

1. The Kentucky State Medical Society erected a monument to McDowell at Danville which was dedicated May 14, 1879. Dr. L. S. McMurtry was chairman of the monument committee. McDowell's remains were removed to Danville and repose under the shadow of the monument. The remains of Mrs. McDowell were subsequently removed to the same spot.—*Note by the Editor.*

his cargo for a large sum at Gibraltar and Lisbon, left his vessel, pushed through Spain and reached Paris late in the same year. He remained nearly four years in Paris and some time in Great Britain, returning in 1814 to America and the wilds of Kentucky. He was noted as a great lithotomist. In the course of some forty years practice, he cut for stone two hundred and twenty times, the first hundred operations being without a death. In February, 1828, he published an article in the *Transylvania Journal of Medicine* on traumatic epilepsy, which created a genuine sensation. His conclusions were based on five cases on which he operated, with a resulting cure in three and marked benefit in the other two. He also described a new operation for hydrocele by excision of the sac, a method now commonly employed, also a series of articles on bandaging, a paper on fractures and one on stone in the bladder, these being the extent of his writings. In 1817 he induced the trustees of the Transylvania University to establish a medical department. In 1819 Dudley's best work began,—that excellent teaching that made him famous,—and his surgical practice grew rapidly, his fees were large and his early experience had made him a good man of business. He retired in 1850, after having built himself a comfortable country house, and died in 1870.

David Hosack was born in New York, August 31, 1769. He was well educated and began his medical studies in the office of Richard Bailey, a well-known surgeon of the day. His study of medicine at that time was very brief. Profiting by the written words of Morgan and Middleton, that a thorough preliminary education was essential, he went to Princeton and graduated a Bachelor of Arts in 1789. Returning to New York, he entered seriously upon the study of medicine, under former teachers of the old Columbia school. After one year he went to Philadelphia and graduated an M.D. in 1791 at the age of twenty-two. He established himself at Alexandria, in Virginia, but after a short stay he returned to New York and, observing the distinction our citizens made between those physicians who had been educated at home and those who had received additional instruction from the universities of Europe, he went to Liverpool, Edinburgh and London, returning to this country in 1794. He was appointed professor of materia medica at the Columbia School when but twenty-eight years old and, on the founding of the College of Physicians and Surgeons, was appointed respectively to the chairs of botany and materia medica, surgery and midwifery, and finally, in 1811, on the reorganization and uniting of the two schools, he filled the chair on the theory and practice of physic and clinical medicine. Hosack was known as an eminent citizen as

well as a popular teacher and a good doctor. At the age of sixty he retired to a comfortable country place on the Hudson and died in 1835 at the age of sixty-six years.

The two most conspicuous names in Boston medicine of the last century are those of Jackson and Bigelow. Jacob Bigelow was born February 27, 1787 and died January 10, 1879, being nearly ninety-two years old. He graduated from Harvard in 1806 and two years later went to Boston to attend the lectures of the medical professors, where he entered the office of John Graham and eked out a scanty income by teaching in the Boston Latin School. After one year he went to Philadelphia for the lectures of Rush, Weston, Physick, Barton, and Cox, and to obtain the doctorate degree. Returning to Boston the elder Jackson chose him as an associate in practice. In 1815 he was appointed lecturer on materia medica and botany and in 1817, at the age of thirty, his title was changed to professor, being the first Rumford professor. In 1820 he was appointed an editor of the first edition of the United States Pharmacopeia, and in 1825 he founded Mount Auburn Cemetery. Up to this time the dead of our cities had been buried in the city churchyards and vaults and the problem of their disposal was becoming an urgent and distressing one. Bigelow's proposition was the founding of an extra urban forest cemetery and after seven years of debate the cemetery at Mount Auburn was dedicated for public use. In 1835 he read an address on "Self limited diseases" before the Massachusetts Medical Society, whose effect was instantaneous and immense. Writing in 1880, Oliver Wendell Holmes says:—

"This remarkable essay has probably had more influence on medical practice in America than any similar brief treatise, we might say than any work ever published in this country. Its suggestions were scattered abroad at the exact fertilizing moment when public opinion was matured enough for their reception."

In 1852 Bigelow delivered before the students of the Massachusetts Medical College, Boston, an essay on medical education in which he urged upon his students the great importance of a thorough scientific training. Among other things he defined the exact sciences and the speculative sciences. Among the latter he placed practical medicine, which he describes as—

"A science older than civilization, cultivated and honored by ages, powerful for good or for evil, progressive in its character but still unsettled in its principles, remunerative in fame and fortune to its successful cultivators and rich in the fruits of a good conscience to its honest votaries. Encumbered as it is with difficulty, fallacy and doubt, medicine yet constitutes one of the learned professions; its imperfections are lost sight of in the over-

whelming importance of its objects; the living look to it for succor, the dying call on it for rescue,"—his final conclusions being, "that he is a great physician who above other men understands diagnosis."

Bigelow took a great interest in all things that tended to improve popular education and knowledge. In one of his addresses he says that:

"Education is the right of many and not the privilege of the few, that the conservatism that restricts education to the classics and what may be called esthetic culture is but the highest form of class selfishness, that such practices are not only in themselves vicious but tend to the lowering of the whole educational fabric, that the underlying thought in education is the teaching how to think and the meaning of study, and this much at least is due to the masses, that it is those things that tend most to the useful arts, to the alleviation of human suffering, to the broadening of the popular horizon for which we must all strive.

When 83 years old he went to California on a pleasure trip; he was blind for the last five years of his life, bedridden but with mind undimmed to the last.

Fearing that I have already exhausted your patience I can only mention some of those whose names shine bright in the galaxy of America's greatest medical men,—Nathaniel Chapman, of Virginia and Philadelphia, John W. Francis of New York, William Gibson of Baltimore and Philadelphia, James Jackson of Boston, Daniel Drake of Kentucky, Casper Wistar, the anatomist of Philadelphia, John Beale Davidge, surgeon, of Maryland, John Redman Cox of Philadelphia, John Eberle of Philadelphia, William Potts Dewees, the father of American Gynecology, William Beaumont, Hugh L. Hodge, Samuel D. Gross, Isaac Ray, Gurdon Buck, Alonzo Clark, Oliver Wendell Holmes, Austin Flint, James Marion Sims, Henry Jacob Bigelow,—these and others too numerous to mention, might occupy us for a full evening.

1012 LOVEJOY STREET.

SOCIETY PROCEEDINGS.

Medical Society of the County of Erie

Semiannual Meeting, June 12, 1906.

Reported By FRANKLIN C. GRAM, M. D., Secretary.

The semiannual meeting of the Medical Society of the County of Erie was held in the rooms of the Society of Natural Sciences, Buffalo Library Building, Tuesday, June 12, 1906, being called to order at 10.30 A. M. by the president, Dr. A. H. Briggs.

On motion of Dr. Charles A. Wall the reading of the minutes of the annual meeting, and of the special meeting, held April 3,

1906, to consider pending medical legislation, was dispensed with and they were approved. The minutes of the special meeting held April 18, 1906, to consider the new by-laws, were read and approved, on motion of Dr. Hopkins. The circular appeal by the Journal of the American Medical Association on behalf of the San Francisco flood sufferers, was received and filed.

The secretary read the resignations of M. A. Crockett and Julius Pohlman as members of this society. The resignation of Dr. Crockett was accepted, as he has removed from the State, but, on motion of Dr. Hopkins, that of Dr. Pohlman was received and laid on the table. The treasurer read a communication from H. H. Bingham, stating that he is not a member of this society. This communication was likewise ordered tabled. The resignation of Dr. Leonard was accepted, as the doctor now resides in Porto Rico.

The treasurer read communications from Dr. A. J. Colton and Dr. George N. Jack, in which they stated that they were members of the Erie County Medical Association and had paid their dues to date in said association. They desired to be released from paying back dues in the Medical Society of the County of Erie, to which they also belonged. Dr. Hopkins moved that the treasurer remit the back dues of Drs. Colton and Jack.

Dr. F. F. Hoyer objected; he stated that he likewise belonged to the society and the association and had regularly paid his dues in each. There were many other physicians who also belonged to both organizations, and it would be unfair to them to remit the dues of those who had neglected to pay in one or the other. Dr. Hopkins said it was not a question of right, but of expediency, and he had made his motion to avoid friction. Dr. Hoyer then withdrew his objections and the motion was adopted.

The treasurer announced that he had a number of volumes of the state society transactions for 1904-1905. On motion he was directed to distribute them among the members.

Dr. Wall, being the only member present from the Committee on Membership, requested the chair to appoint temporary substitutes. The president appointed Drs. F. F. Hoyer and J. H. Grant. This committee reported favorably upon the applications of Drs. William M. Mehl, 11 E. Genesee St.; Dr. Julius Richter, 1345 Clinton St.; H. Arnold Pierce, Blasdell, N. Y.; and Herman K. DeGroat, 267 Carolina St. On motion, the secretary was directed to cast the ballot of the society in favor of these applicants, and they were declared duly elected.

The treasurer desired to know how much to collect from these new members. On motion of Drs. Gram and Krauss he was directed to collect one dollar county dues and three dollars state

dues, for 1906. The new members were then introduced to the society by President Briggs.

Dr. William C. Callanan, who had been appointed for that purpose, read the following memorial of Dr. John J. Walsh:

IN MEMORIAM—JOHN J. WALSH.

Dr. John J. Walsh was the son of Dr. Nicholas Walsh and was born in Ireland, December 8, 1848. The following year his parents came to the United States. His father was at one time Coroner of Erie County. When a young man, Dr. Walsh first took up the study of law, but later turned to medicine and for a time he was a sanitary inspector in the department of health. He has served as medical examiner in many of the German branches of the C. M. B. A., was secretary of the alumni association of the Medical Department of the University of Buffalo and was connected with the medical staff of the Sisters' of Charity Hospital.

Dr. Walsh was a member of the Medical Society of the State of New York, the Medical Society of the County of Erie, of the C. M. B. A., of the Knights of Columbus, of the Buffalo Catholic Institute and several other organizations. He is survived by a son, Attorney Walter B. Walsh, two brothers, Edward F. and Louis C. Walsh, and one sister, Mary J. Walsh. He died December 6, 1905.

The memorial was adopted and ordered to be spread upon the minutes.

Dr. William C. Krauss stated that Dr. F. F. Hoyer had been a member of this society for many years and moved that he be made an honorary member. The motion was unanimously adopted. Dr. Hoyer thanked the society for this great compliment, saying that he had practised medicine for about 60 years and had been a member of this society for 50 years.

Dr. Wall said that provision for honorary membership should be made in the new by-laws. He was directed to draft such a section. Dr. Wall then presented the new by-laws, as adopted at the meeting of April 16, 1906.

The secretary read a letter from the Medical Society of the State of New York, signed by the President and Secretary, approving the proposed by-laws. Dr. Wall moved the adoption of the by-laws, with the exception of several corrections which he noted.

Dr. Hopkins objected to the proceedings and stated his reasons. The society may adopt any by-laws, but these must be in accordance to the statutes and laws of the State of New York. He asked the society not to adopt by-laws which are at variance with the laws of the State.

Dr. Wall said that the legislature has the power to undo acts of previous legislatures and create an entirely new act. This was done by the legislature. He read the act which amalgamated the society and the association.

Dr. Hopkins said this statute simply authorized the amalgamation of the society and the association, but did not authorize any change in the medical law. There is no reason why the laws which were in force for 85 years are not good now.

Dr. Cohen raised the point of order that the legal question involved had been settled by competent authorities. Dr. Hopkins asked to have the act read, which authorized the amalgamation. Dr. Wall then read the act. Dr. Hopkins insisted that this simply reenacted existing laws and offered the following resolution, which was seconded by Dr. Blaauw, and adopted:

Resolved, That the by-laws reported by the committee, as printed and corrected, be submitted to the counsel of this society for examination, and opinion as to whether they conflict in any manner with the statutes of the State of New York now in force, and that such report of counsel be made at an adjourned meeting on the second Monday in October, at an evening session, the place to be subject to the call of the Chair.

At 12:10 the society adjourned until the second Monday evening in October.

Therapeutic Note.

THE PROPER STRENGTH OF ADRENALIN SOLUTIONS IN THE TREATMENT OF HAYFEVER.

In the treatment of hay fever with adrenalin chloride, it has been suggested that weak solutions, frequently applied, are apt to yield better results than the occasional application of a strong solution. One of the pathological features of this peculiar malady is a turgescence of the turbinal tissues due to excessive dilation of the capillaries. That this is the result of a neurosis involving more or less pronounced vasomotor paralysis is pretty generally conceded. Overstimulation, by reaction, is very sure to result in a complete paralysis of the vasomotor supply in the region affected. On the other hand, gentle stimulation with weak solutions is not so likely to be followed by reaction.

These views are in harmony with the published observations of Crile, of Cleveland, who found that in a decapitated animal the heart's action was better sustained by the continuous administration of a weak solution of adrenalin chloride. Furthermore, this is probably nature's method of supplying this vital principle to the healthy human body through the agency of the suprarenal gland, its constant presence in the blood in minute amounts being sufficient to maintain vasomotor equilibrium.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 284 FRANKLIN ST., BUFFALO, N. Y.

VOL. LXII.

AUGUST, 1906.

No. 1

Fifty-Seventh Meeting of the A. M. A.—1906.

THE Boston meeting of the American Medical Association will be remembered long and pleasantly by all who were so fortunate as to attend, because of many of its special features and for the excellence of its scientific work. The weather during the entire week was favorable to all the functions and work, whether held indoors or on the lawns, and for riding or driving it could not have been more propitious. Good weather is an important factor in promoting a successful gathering of men and women in such large numbers as attended at Boston.

This brings us to remark that the registry was much larger than ever before, reaching the aggregate of plus 4,700, which means a probable attendance of at least 6,000 persons including families, foreign, other guests and exhibitors. The meeting, therefore, was probably the largest medical gathering the world has ever witnessed. The cause is not difficult to determine. In the first place, Boston is an attractive city, full of historic interest, a city of culture, art, refinement and charming people. Again, the management of the details of the meeting was superb. The chairman of the committee of arrangements, Dr. Herbert L. Burrell, and his capable staff opened the campaign many months beforehand and pursued it with energy until the meeting was over. The large influx of people took their appointed places at the several hotels and boarding houses without friction, while all the social functions were arranged with a completeness that could only follow most careful preparation and thorough discipline.

The House of Delegates performed an astonishing amount of work and avoided serious conflict in discussing the several divergent interests of a large and rapidly increasing constituency, adjourning with a consolidated and improved condition of the profession as the result of its arduous legislative work. President McMurtry in his address at the opening session of the

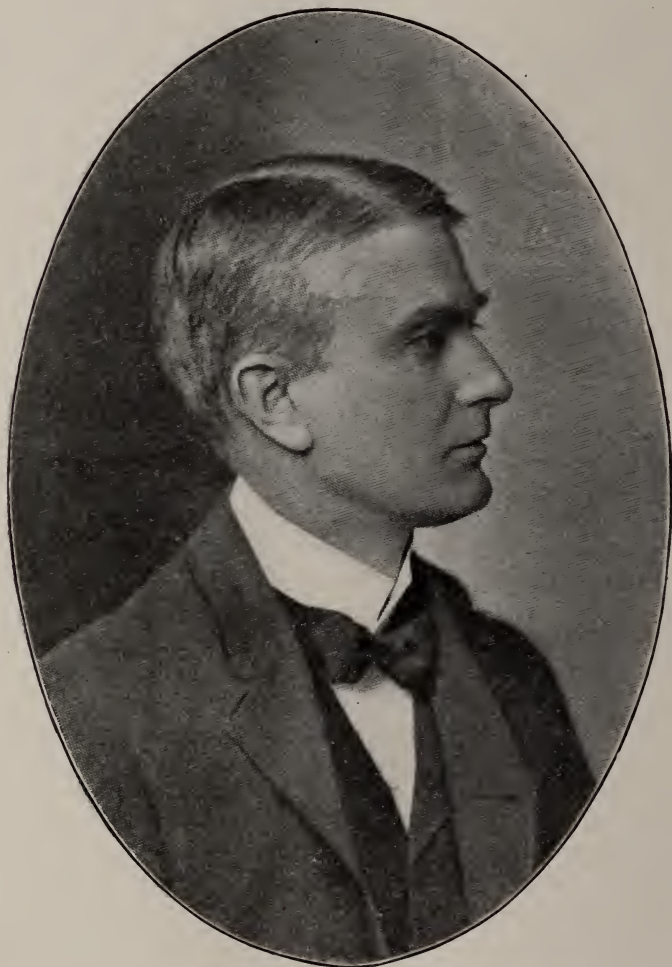
house called attention, *inter alia*, most felicitously to the fact that for the first time in twenty-five years the medical profession of the state of New York was represented in the councils of the American Medical Association. "During all this period," said he, "the schism in this state had prevented representation from the very society which took the initiative in founding this national association." Dr. McMurtry's words, which were in the nature of a welcome to the delegates from the Medical Society of the State of New York, representing a reunited profession in the Empire state, were received with hearty applause.

The President made several valuable recommendations for the improvement of medical conditions, one of the most important of which related to the manner of voting for trustees. Heretofore, it has been the practice to vote for the three candidates to fill vacancies occurring each year in one group, whereas now, under the wise suggestion of Dr. McMurtry, a separate ballot for each trustee must be voted.

The ceremonies opening the general session on Tuesday were more elaborate than ever before. After the large auditorium of Mechanics Hall was filled, the procession which had formed in the banquet hall, led by the band of the first corps of cadets, marched up the aisle amid the plaudits of the vast assemblage. The marshal was Dr. Paul Thorndike, his chief aide being Dr. T. L. Wilson, and his staff was augmented by a large corps of assistants, all being the younger members of the profession. Preceded by a group of policemen and following the band, Governor Curtis Guild, Jr., and the Reverend Edward Everett Hale led the column. Then followed Dr. Herbert L. Burrell, chairman of the committee of arrangements, escorting Mayor Fitzgerald; next came the officers of the association led by President McMurtry and President-elect Mayo, and after these the foreign guests each escorted by an ex-president or other prominent member of the association. These with a few invited guests, among whom were Drs. S. Weir Mitchell and Alonzo Garcelon, made up a stage group of imposing presence.

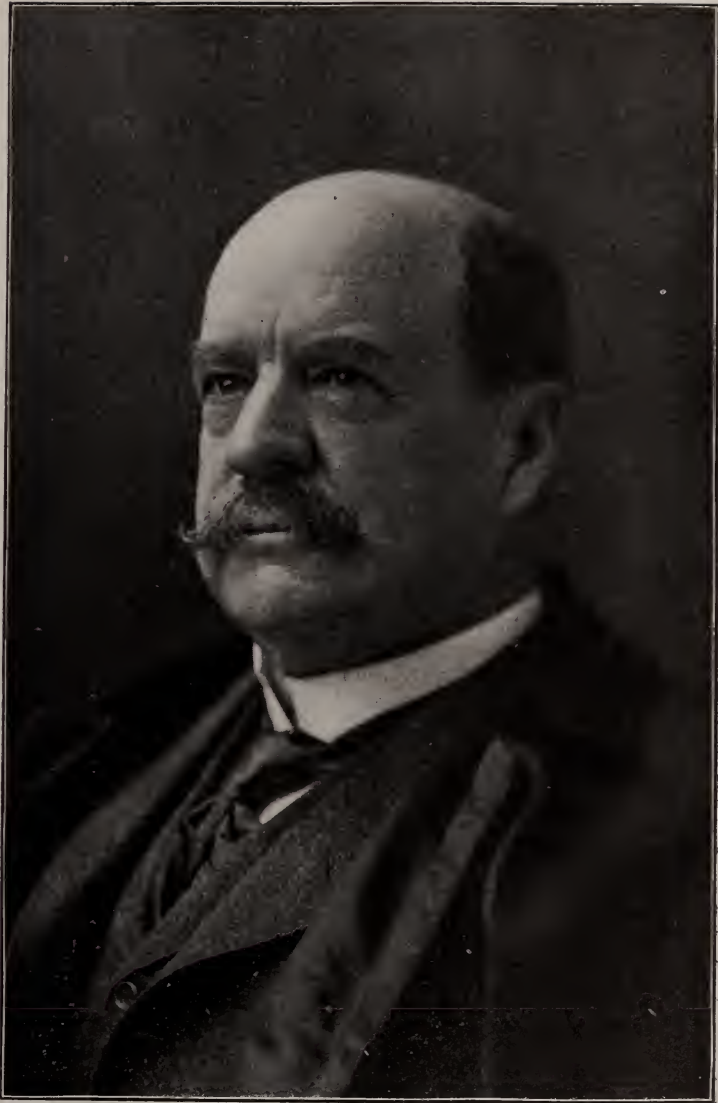
Dr. Lewis S. McMurtry, the retiring president, acted as master of ceremonies and after a few words of greeting he introduced the Reverend Dr. Hale, who pronounced the invocation. Governor Guild was then introduced and was given a most cordial greeting by the great audience. The Governor's speech of welcome was one which may well serve as a model of eloquence and patriotic utterance for similar occasions. It deserves to be preserved in the history of the Boston meeting. Next after the Governor, Dr. McMurtry introduced President Eliot of Harvard University, who, with befitting words, welcomed the association in the name of the institution over which he presides.

Dr. Richard T. Cabot, President of the Massachusetts State Medical Society, who brought the greetings of that body, was next introduced and welcomed the American Medical Association in behalf of the medical profession of the commonwealth of



WILLIAM J. MAYO, M. D.
President of the American Medical Association.

Massachusetts. Next after Dr. Cabot, the president introduced Mayor Fitzgerald, whose address of welcome on behalf of the city of Boston, was manly, eloquent, classic and in every way befitting the occasion. After the mayor came Dr. Burrell,



JOSEPH DECATUR BRYANT, M. D.

President-elect of the American Medical Association.

who, as chairman of the committee of arrangements, gave the usual budget of information and then President McMurtry, as his last official act, introduced the President-elect, Dr. William J. Mayo, of Rochester, Minnesota, who proceeded to deliver the annual address.

Dr. Mayo's personality is an interesting one. Slightly below medium stature, with hair tinged with grey,—prematurely so one would say,—he stands erect and looks straight into the eye of the person with whom he talks, speaking earnestly and interestingly, without circumlocution but with intelligence. He has the air of a man unaccustomed to leisure, and takes up one thing after another as presented, not impatiently but reaching for the second just as the first is finished. His address, already published in the journals, is a state paper of importance, showing a grasp of American medical affairs, and in intimate acquaintance with medical men. He made a hit in the house of delegates when, after some of the members had presented complaints, he surprised and amused the house by stating that if any others had grievances then was the time to present them.

The scientific work of the several sections was of excellent quality, but some of the programs were too crowded to afford justice to all the papers. If the association continues to grow at the present rate something must be done to limit the number of papers, or to increase the number of sessions. It would appear to be a good plan to increase the number of days to five for each annual meeting. If this were done and great discrimination exercised by the officers of sections in preparing their programs, much valuable time could be saved for the discussions which in consequence could be given wider range.

The social features of the meeting were conducted on a grand scale. The public receptions were superbly managed, and the numerous private dinners and luncheons added much to the enjoyment and recreation of the members and visitors. Two of these deserve special mention,—one being Dr. Mayo's dinner to the foreign guests on Monday evening, which was simply perfect in all its details: the other consisted of a series of afternoon teas on the terraces of the Harvard University grounds at four o'clock Tuesday, Wednesday, and Thursday, at each of which Dr. John Collins Warren and Mrs. Roger Wolcott received, all the members and their families being invited.

Dr. Joseph Decatur Bryant, of New York, was elected president for the next year by the House of Delegates on Thursday, and it is difficult to say how this important duty could have been performed in a more satisfactory fashion. Dr. Bryant has been

identified prominently with American medicine and medical affairs for more than twenty-five years, during which time he has taught either anatomy or surgery in what is now University and Bellevue Medical College. He is the author of a treatise on surgery in two volumes which is used as a textbook in our leading medical colleges, and also is the senior editor of the American Practice of Surgery, a work in eight volumes, the first of which has just been published, and which is designed to be the most comprehensive surgical treatise ever issued from the press, in this or any other country.

Dr. Bryant is the reigning president of the Medical Society of the State of New York, serving his second term and was conspicuous in promoting the unification of the medical profession in the Empire state and, as a leading member of the joint committee, did as much, perhaps, as any other member to restore harmony through the amalgamation of the two state medical organisations so happily accomplished last year.

It is more than probable that the national association had this fact in mind in inviting Dr. Bryant to the presidency so soon after the chair had been held by another distinguished New Yorker. Be that as it may, the new president takes office at the right time to further solidify the bands of unity that he so capably helped to forge during all the years of arduous committee work in relation to amalgamation.

IF any of our readers are interested in automobiles, all such will find a card on page x of our advertising columns offering for sale a Pierce Stanhope in perfect order and at a low price.

ATTENTION is invited to the advertisement of the Buffalo Electro-Mechanical Company on advertisement page xx. Physicians in need of supplies or repairs relating to electro-therapeutic instruments, or to any electrical work, will do well to call on this company.

WE have called attention heretofore to the needs of San Francisco physicians in regard to materials for office use, such as instruments, books, clinical thermometers and the like. Last month we published a letter from Dr. Charles G. Stockton, of this city, on the subject. Again we make the appeal and invite attention to Dr. Stockton's letter, in which it is announced that the librarian of the University of Buffalo, 24 High Street, will receive all such contributions and ship them to their appropriate destination. Let it not be said that physicians in Buffalo are derelict in this important duty.

PERSONAL.

DR. EDWIN A. BOWERMAN, 234 East Utica Street, was reelected secretary of the Buffalo Academy of Medicine at its last annual meeting.

DR. A. C. GRIFFITH, of Kansas City, recently paid a visit to Buffalo for a few hours. Dr. Griffith and Mr. Watson Armour, vice-president of Armour & Co., and in charge of the Kansas City works, are making a little vacation tour of the east, their objective point being the White Mountains.

DR. NELSON W. WILSON, of Buffalo, has been appointed lecturer on diseases of the genitourinary system at the University of Buffalo, vice Dr. D. W. Harrington, deceased. Dr. Wilson has special fitness for the duty to which he has been assigned, having pursued studies and limited his practice for some years to that department of medicine.

DR. JULIUS POHLMAN, of Buffalo, who, with his family, has been in Europe for some weeks, has returned and resumed the practice of his specialty—ophthalmology.

DR. L. A. WHITNEY, for the past several years resident physician and surgeon and assistant superintendent of the New York State Hospital for Crippled and Deformed Children, at West Haverstraw, N. Y., announces his resignation from that institution and location at 33 Clinton Avenue, South, Rochester, N. Y., for the special practice of orthopedic surgery.

OBITUARY.

DR. DAVID B. HORTON, of Wolcott, N. Y., a graduate of the University of Buffalo, 1874, died in his office July 9, 1906, from the effects of carbolic acid, presumably taken with suicidal intent. Recently he suffered a cerebral attack which was followed by despondency, this leading to the action above described. He had attained professional prominence in his time as president of the Medical Society of the County of Wayne.

DR. JOSEPH L. HOWELL, of Avoca, N. Y., died at his home July 9, 1906, aged 38 years. His disease was typhoid fever and his death occurred at the end of the second week.

DR. HENRY BAETHIG, of Buffalo, died at his home, No. 350 Pennsylvania Street, July 14, 1906, from a sudden attack of heart fail-

ure, aged 56 years. Dr. Baethig was a native of Nuremberg, Germany, and came to Buffalo with his parents when he was an infant. He received his preliminaries in the public schools of this city and took his doctorate degree at the Hahnemann Institute at Philadelphia. He has practised his profession in this city since graduation and of late years has been regarded as one of our leading homeopathic physicians.

SOCIETY MEETINGS.

THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS will hold its nineteenth annual meeting at the Hotel Havlin, Vine Street, between Fifth and Sixth Streets, Cincinnati, Thursday, Friday and Saturday, September 20, 21 and 22, 1906.

The Fellows of the association residing in Cincinnati constitute the committee of arrangements, of which Dr. Charles Lybrand Bonifield, 432 West Fourth Street, is the chairman, and Dr. Magnus A. Tate, Vindondissa Building, is the secretary, either of whom will furnish information to members and guests upon application.

The following is a list of papers offered up to the present date:

1. The president's address, John Young Brown, Saint Louis.
2. Porro-Cesarean section for pregnancy complicating fibroids; mother and child saved, James F. Baldwin, Columbus.
3. Fixation of the kidney by shortening of the nephrocolic ligament; with report of cases, Charles A. L. Reed, Cincinnati.
4. Obstruction of the bowel from gallstone, Miles F. Porter, Fort Wayne.
5. Preservation of the vault of the vagina in pelvic operations, A. Vander Veer, Albany.
6. Title to be announced, James N. West, New York.
7. Diffuse peritonitis, John B. Murphy, Chicago.
8. Title to be announced, Richard Douglas, Nashville.
9. Abuse of purgatives in surgical patients, Edwin Walker, Evansville.
10. Atresia vaginæ; observations and experience on symptoms and treatment, Augustus P. Clarke, Cambridge.
11. Title to be announced, J. H. Carstens, Detroit.
12. " " " " M. Rosenwasser, Cleveland.
13. Intestinal obstruction; report of cases, Rufus B. Hall, Cincinnati.
14. Vaginal celiotomy; its indications and limitations, Samuel Wyllis Bandler, New York.

15. The rectum in pelvic disease, H. O. Pantzer, Indianapolis.
16. The Gilliam operation for displacement of the uterus, D. Tod Gilliam, Columbus.
17. Title to be announced, X. O. Werder, Pittsburg.
18. " " " " Louis Frank, Louisville.
19. " " " " Walter B. Dorsett, Saint Louis.
20. " " " " W. A. B. Sellman, Baltimore.
21. " " " " Charles G. Cumston, Boston.
22. " " " " Wm. H. Wenning, Cincinnati.
23. Report of a case, William H. Humiston, Cleveland.
24. Reflex dyspepsias from abdominal and pelvic disease, H. E. Hayd, Buffalo.
25. Peritoneal adhesions, Robert T. Morris, New York.
26. Kidney and colon suspension by use of the gastric capsule and nephrocolic ligament, Howard W. Longyear, Detroit.
27. Title to be announced, John D. S. Davis, Birmingham.
28. " " " " Walter B. Chase, Brooklyn.
29. " " " " Thomas B. Eastman, Indianapolis.
30. " " " " O. H. Elbrecht, Saint Louis.
31. Trend of the times in appendectomy, N. Stone Scott, Cleveland.
32. Puncture of the nonpuerperal uterus with prolapse of the bowel; violent seizure and tearing away of sixteen inches of gut; prompt abdominal section, intestinal anastomosis, and repair of uterine lacerations; recovery, Charles E. Congdon, Buffalo.
33. Epithelioma of the female urethra; a clinical note, L. S. McMurtry, Louisville.
34. Title to be announced, Joseph Price, Philadelphia.

JOHN YOUNG BROWN,

WILLIAM WARREN POTTER,

President.

Secretary.

THE BUFFALO ACADEMY OF MEDICINE is inviting all members to contribute to the program for the academic year beginning October 1, 1906. The title of the paper and the name of the section before it which it is proposed to read it should be sent to the general secretary, Dr. Edwin A. Bowerman, 234 E. Utica Street, Buffalo.

THE BRITISH MEDICAL ASSOCIATION will hold its seventy-fourth annual meeting at Toronto, August 21-25, 1906, under the administration of George Cooper Franklin, of Leicester, president, and Richard Andrews Reeve, of Toronto, president-elect.

THE MEDICAL SOCIETY OF THE COUNTY OF NIAGARA held its annual banquet at Olcott Beach Hotel, July 3, 1906. Dr. Roswell Park, of Buffalo, was the principal speaker and his subject was, "The Discovery of the Circulation."

THE LAKE KEUKA MEDICAL ASSOCIATION at its annual meeting held at Grove Springs, July 5-7, 1905, elected the following named officers for the ensuing year: president, J. E. Walker, Hornell; vice-president, F. A. Driesbach, Dansville; secretary and treasurer, H. B. Nichols, Pulteney.

THE AMERICAN ROENTGEN RAY SOCIETY will hold its seventh annual meeting at the Cataract-International Hotel, Niagara Falls, August 29-31, 1906, under the presidency of Dr. Henry Hulst, Grand Rapids, Mich. The secretary is Dr. George C. Johnston, 611 Fulton Building, Pittsburg.

COLLEGE AND HOSPITAL NOTES.

THE NEW YORK POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL has issued its Twenty-fifth Annual Announcement which is for the school year of 1906-7 that begins October 1, 1906. The directors invite the attention of the medical profession of this country, Canada, and the West Indies to the advantages possessed by this school for post-graduate instruction, in which is taught every branch of medicine and surgery with a scientific purpose to instruct those who attend, so they may be able to do themselves whatever they see the instructors do. The equipment is complete as to material and ability of the faculty and nowhere in the world is more conscientious or more valuable instruction given. Every physician who would keep pace with medical progress should spend a few weeks in each year at this school.

THE KING EDWARD VII SANATORIUM FOR CONSUMPTIVES has been built at Midhurst, and lately was opened by their Majesties, King Edward and Queen Alexandra. The money cost of the institution was one million dollars and its equipment is probably the finest of its kind in the world. Its location in Sussex on the South Downs, is superb; it is six hundred feet above sea level, and is twelve miles inland; the grounds include about one hundred and fifty acres, the buildings and terraced gardens being sheltered on the North by pine woods. Accommodations have been made for one hundred patients, each provided with 1,730 cubic feet of air in their sleeping rooms. The walls resemble porcelain and their sanitary finish is perfect. Without doubt this splendid charity is unequalled, and it reflects the highest credit to Great Britain.

BOOKS AND AUTHORS.

The Influence of the Menstrual Function on Certain Diseases of the Skin. By **L. Duncan Bulkley**, A.M., M.D., Physician to the New York Skin and Cancer Hospital, Consulting Physician to the New York Hospital, Consulting Dermatologist to the Randall's Island Hospitals, to the Manhattan Eye and Ear Hospital, and to the Hospital for Ruptured and Crippled, etc. Demi-octavo, pp. 108. New York (1123 Broadway) and London: Rebman Company. (Price: \$1.00).

The author of this volume is known the world over as one of the leading dermatologists of America and as one who has the faculty of imparting his knowledge of the subject, by tongue or pen, with great perspicuity. He is the author of many monographs as well as treatises relating to diseases of the skin. That phase of the topic dealt with in this monograph is not only novel but most interesting to the gynecologist as well as general practitioner. Bulkley has grouped here a mass of facts that bear on the menstrual cycle which cannot fail to attract attention and must lead to further observations concerning the relationship between menstruation and skin diseases.

The following synopsis by chapters will give the reader a good idea of the way the author handles the subject. In chapter I are found general considerations, and also menstruation as only the culmination of "cyclic changes" in the system, is presented. Then follow changes in the urea, temperature and weight of body, thyroid gland, blood, nervous system, and the like.

In chapter II, clinical records are offered under the following headings: personal instances of the influences of menstruation in certain diseases of the skin; influence of menstruation on acne, eczema, herpes, pemphigus, dermatitis herpetiformis, lichen, urticaria, edema and cutaneous nodes, erythema, erysipelas, ecchymosis and purpura, "bloody sweat," pruritus, psoriasis, dermatitis seborrheica, hyperidrosis, bromidrosis, chloasma, melanoderma, furunculosis, abscess, syphilis, lupus, epithelioma, scleroderma, morphea, hypertrichosis, and the like.

In chapter III, an analysis of facts and theories is recorded. The most plausible theories as to influence, for example, as:

1. Cyclical changes in the general system. 2. Auto-intoxication of genital origin. 3. Nervous reflex irritation from congested genital apparatus.

Application of theories to various results in the skin.

Finally in chapter IV, treatment is presented. A bibliography is then given and the volume closes with an excellent index.

On the Nature, Causes, Variety and Treatment of Bodily Deformities. By the late **E. J. Chance**, F.R.C.S., Eng. Edited by **John Poland**, F.R.C.S., Eng. A series of lectures. Second edition. In two volumes—Vol. I. Duodecimo. pp. 314. London: Smith, Elder & Co., 15 Waterloo Pl., S. W. 1905. (Price, 6s net. \$1.50).

Mr. Chance was one of the foremost orthopedic surgeons of his time, and was a pioneer as a specialist in that branch of surgical science, in which he did much original work. The lectures

which form the basis of this book were delivered over fifty years ago; the book itself was published first over forty years ago, while the distinguished author has been dead more than ten years. To be a good orthopedic surgeon a man must be a mechanic, a pediatrist, a general surgeon, and, likewise, possess inventive genius. Mr. Chance was all of these and more; he was not only devoted to the science of medicine as a whole, but was broadly trained as a man.

No one can read these lectures without absorbing knowledge. They betray anatomical knowledge, surgical skill, and artistic accomplishment. They deal with the subject differently from the way adopted by most authors, and many of the illustrations are drawn by the author's own hand. The editor, too, has performed a difficult task most admirably, in fashioning the work to meet present conditions.

A Laboratory Manual of Physiological Chemistry. By **Elbert W. Rockwood**, M.D., Ph.D., Professor of Chemistry and Toxicology and head of the department of Chemistry in the University of Iowa. Second edition, revised and enlarged. With one colored plate and three plates of microscopic preparations. Large 12mo, 229 pages. Philadelphia: F. A. Davis Company. (Price: \$1.00 net).

The progress made in the department of biology dealt with under the name of physiologic chemistry has been very considerable during the last seven years, or since the first edition of this manual was sent out. A new edition, therefore, became imperative in order to present the subject in its best light and in proper form. The same general plan has been adhered to as in the original, the changes being principally such as further experience has suggested. It is essentially a book for the student to use during his laboratory studies, but is equally useful to the general practitioner who is wont to study his cases in the light of clinical laboratory investigation. To all such we most heartily commend it.

Transactions of the American Surgical Association for the Year 1905. Volume XXIII. Edited by **Richard H. Harte**, M.D., recorder of the Association. Printed by the Association. William J. Dornan, Philadelphia, 1905.

This volume contains the record of the work of the association at its San Francisco meeting held July 5-7, 1906, under the presidency of Dr. George Ben Johnston, of Richmond. The subject of the presidential address is "John Peter Mettner," and is a biographic sketch of this distinguished and somewhat eccentric physician, who practised medicine and surgery in Prince Edward County for nearly three-quarters of the nineteenth century. The story is told in Dr. Johnston's peculiarly graceful fashion, and furnishes charming entertainment for a leisure hour.

Many papers of surgical interest and importance go to make up a valuable book, only two of which, for lack of time and space,

may we mention. Dr. George Ryerson Fowler presented the history of a case of suture of the spinal cord for gunshot injury causing complete severance of the cord. Twenty-six months after the operation the patient was living, but voluntary motion in the affected area was practically lost. Dr. Rudolph Matas gave his further experiences in the radical operation for the cure of aneurysm, by his own method of intrasaccular suture. A group of 27 cases was reported from all operators, without fatal results.

LITERARY NOTES.

"DIET AFTER WEANING" is the title of a handsome brochure issued by the Mellin's Food Company, Boston. It is a duodecimo of forty-six pages, giving useful hints for baby-feeding and is illustrated by numerous half-tones of fine healthy looking children. It is printed on heavy book paper with illuminated margins and is bound in red vellum, making a beautiful specimen of the book-makers art. It will be sent free on application to the publishers by any mother or physician, on mentioning this Journal.

MESSRS P. Blakiston's Son and Company, Philadelphia, announce that the second edition of the treatise on Diseases of Children, by J. Madison Taylor and William H. Wells, has been translated into Italian by Dr. Mario Flamini, of the Pediatric Clinic of Rome, with contributions by Professor Concetti and Dr. Valagussa. This is a distinctive honor few American books have been accorded and the success of the work abroad is only second to the favor it has received at home.

MISCELLANY.

A board of officers will be convened to meet at the Bureau of Public Health and Marine Hospital Service, 3 B Street, S. E., Washington, D. C., Monday, August 6, 1906, at 10 o'clock A. M., for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health and Marine Hospital Service. For full information, or for invitation to appear before the board of examiners, address: The Surgeon-General, Public Health and Marine Hospital Service, Washington D. C.

THE MORSE INTERNATIONAL AGENCY OF NEW YORK AND LONDON, one of the largest advertising houses in this country, is represented in Buffalo and the west by the Macdonald-Olmsted Advertising Company, which has opened commodious and well appointed offices in the German-American bank building, Buffalo. This is one of the finest locations in the city and bespeaks the good judgment of both principal and resident agencies.

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

SEPTEMBER, 1906.

No. 2

ORIGINAL COMMUNICATIONS.

Etiology of Functional Nervous Diseases¹

BY JAMES WRIGHT PUTNAM, M. D., Buffalo, N. Y.

Professor of Diseases of the Nervous System in the University of Buffalo; Fellow and Ex-president of the American Neurological Association.

THE subject of etiology in functional nervous diseases was chosen because in the neuroses we are sure to find either our greatest successes or our greatest failures. In these cases it is not sufficient to make a diagnosis of the disease but it is equally necessary that we should discover all the etiological factors in a given case in order to successfully treat it. I speak of factors, because in my experience, it is not the rule to find a single cause. The habits and occupation of the patient; the condition of the eyes as regards refractive errors or balance of ocular muscles; the condition of the respiratory gastrointestinal and the genito-urinary tracts; the pelvic organs; the condition of the blood and the urine; mental strain; physical shock; fright; any of these may act either alone or in varying combinations to produce various clinical pictures of nervous disorders. Each of these causes may produce many symptoms widely dissimilar. We are also liable to find in a series of patients similar symptoms produced by different causes. A study of my cases shows that the various functional diseases with very different symptoms may result from a single cause; that is, one cause may produce different diseases and the reverse is true that several different causes may produce identical symptoms in different patients.

I have found that eye difficulties of various kinds will cause in one patient symptoms of a mental type, in another patient, motor or muscular symptoms will be produced, while in another the symptoms may be purely sensory in character. In a fourth we may have general constitutional disturbances. The mental symptoms will range from simple fatigue after slight mental effort, as reading or writing, to a more serious condition of confusion of thought, forgetfulness, mental irritability, inability to

1. Read at the meeting of the Medical Society of the County of Niagara held at North Tonawanda, May 1, 1906.

concentrate the mind on any subject. Motor symptoms amounting to serious disease, such as chorea, habit spasm, torticollis, have all been observed many times by different clinicians as a result of eye defects.

As to the production of epilepsy by errors of refraction I am still to be numbered among the skeptical. I am mindful of the good results claimed by Dr. Stevens and the late Dr. Ranney in a series of cases of epilepsy treated by refraction, but on the other hand I bear in mind the fact that similar results have not been reported by other observers, and further, that the claims of these gentlemen were fully investigated by a committee of the New York Neurological Society and a report made that those claims of cure were not justified. More recently, at Sonyea Colony for Epileptics in New York no case of epilepsy has been cured by the treatment of the eyes, by such eminent men as Dr. Gould, of Philadelphia and Dr. Bennett, of Buffalo. In my own experience I have frequently come across cases of epilepsy who had coincident eye defects. Some of these have been cured but I have never succeeded in curing the patient by eye treatment alone. To this experience Dr. Spratling of Sonyea, contributes the following note:

"I desire to add a brief clinical note to the paper I published in *American Medicine*, April 9, 1904, 'The Nonoperative Relief of Eyestrain for the Possible Cure of Epilepsy as Tested in 68 Cases at the Craig Colony.' As a result of this test, so painstakingly made by Dr. Gould and Dr. Bennett, one patient only seemed to show a possible recovery from the use of glasses. I can best state the case by quoting from the article in question:

'One male patient (O. B., No. 3), who had 27 attacks between January and September, 1902, had 4 in September, 4 in October, and 4 in December, 12 in all, after he commenced wearing glasses on September 1, 1902. After January, 1903, he had no further attacks up to the date on which this was written, December 1, 1903, a period of 11 months.

His attacks were all grand mal, and of great severity, and were announced some time in advance by a motor aura in the form of a quick, jerking movement in one hand. After a few minutes, the hand, after being lifted higher with each movement, would be jerked straight above the head each time. As soon as the acme of this warning was reached, a similar movement commenced in the left hand, and went through the same order, the attacks appearing after both hands were simultaneously jerked above the head. The patient lives an active, outdoor life, is robust and strong in every respect, and has had epilepsy since his seventeenth year, his present age being 38 years.

He shows a slight degree of epileptic irritability at times, but nothing in the way of permanent mental enfeeblement. He is, or

was, an excellent illustration of a motor epileptic, the type in which motor manifestations are marked to the exclusion of those that involve the psychic side. The arrest in his disease now bids fair to pass into complete and lasting recovery."

It is a matter for regret that the arrest in this patient's disease, which seemed at one time to bid fair to pass into recovery, did not fulfill such a promise. After being fitted with glasses on September 1, 1902, this man had no seizures during the remainder of that or during the following year.

In January, 1904, his glasses were broken, and while not wearing them he had several attacks, 4 in January, 6 in March, and 4 in April. The 6 in March and the 4 in April occurred *after* he had again put on glasses. After April he had no more attacks during 1904, but they recommenced in January, 1905. In that month he had 1, in February, 5."

SENSORY SYMPTOMS CAUSED BY EYE STRAIN.

Headaches are of the first importance. These may be either periodical or continuous, varying or unvarying in severity; occipital, vertical, temporal or frontal in location. They may be lateral or bilateral. They can be angiospastic or angioparalytic in type. All of these different forms of headache may result from different eye difficulties. This has been brought out most prominently by Dr. Gould, in his various articles on headache and eye strain, and notably in his series of biographic clinics. Again, we have as a result of eye strain, general constitutional disturbances of digestion or we may have a symptom grouping of neurasthenia and hysteria. Of this I am certain as a result, not only of my own observation, but of the observation of others, and I have sent patients who have been unable to regain health by other means of treatment, who have made speedy recoveries when the etiological factors of uncorrected eye difficulties had been removed. If, then, uncorrected ocular difficulties will cause symptoms so widely different, surely the correct diagnosing of a disease is not the all important thing. Have we done our duty by diagnosing neurasthenia or hysteria or migraine or epilepsy or chorea? Must we not go further and seek the cause before we are ready to undertake the cure? Of course all physicians answer "yes, the cause must be sought for and removed." Theoretically, all agree but practically we often see only the empirical method of treatment.

For epilepsy, bromides are prescribed; for chorea, arsenic; for migraine, cannabis indica and migraine tablets. Such prescribing is indeed fruitless if there is in any of these cases a causative factor which has not been discovered, and which if discovered and removed must be the basis of successful treatment. To achieve this in ocular defects, the general practitioner labors at a

great disadvantage when he attempts their detection and correction, because when the suggestion is made that the eyes may bear some relation to his disease, we are frequently met by the patient's statement that an oculist has already examined him, that his eyes have been fitted to glasses and that as the symptoms continued the trouble could not be with the eyes. Illustrating this point I refer to a case of a peculiar type of headache that was referred to me from Warren, Pa.

The patient, a man in business, complained of pain over both temporal regions. The pain came on promptly at 9 A. M. and remained until 5 P. M., when it disappeared. This was a daily occurrence, of unvarying severity, and had persisted for a year. After a careful examination I was unable to detect any cause for his headache, but I was impressed by the fact that the headache began when he went to his office and disappeared when his work was done. I decided that the most important cause was an undiscovered eye defect. When I told him this he explained the vision had already been tested and glasses had been put on without benefit. Being still unsatisfied I insisted that glasses were often a misfit, and that oculists varied in their prescriptions for glasses as much as general practitioners would vary in their prescriptions for medicine. I referred him to Dr. Pohlman for examination and prescription. The result was the discovery by Dr. Pohlman of an undetected and uncorrected astigmatism, for which he prescribed the proper lenses. A letter from the patient received some months ago conveyed the glad tidings that he was entirely free from his old headache.

I report this case not because it is unusual, but because it illustrates the fact that the general practitioner is only too frequently at the mercy of the oculist. Many a time in the past few years I have been convinced that certain symptoms were due to a cause connected with the eye in patients who have refused to consult another oculist as they had too frequently been disappointed. In such cases as that I make it a rule first to test the eyes without glasses, and then to test them for reading with the glasses they are at that time wearing, first testing one eye and then the other. In this way it is possible to determine whether the correction gives equal visual reading distance to the two eyes. Frequently the patient will observe that the visual distance for the two eyes differs even with the glasses. If he does notice this it is easier to make him go a second time through the tedious and expensive ordeal of the oculist's office. If my crude examination reveals nothing I persuade or insist, according to circumstances, until he consents to visit an oculist whose work I know and in whom I have confidence.

A case of chorea occurred for three successive Octobers. The case was treated with arsenic and iron, each time the child being taken from school. Then, believing that there might be a causal relation between the chorea and the school work, I sent her to Dr. Grove who found a large refractive error which he corrected. The following October when the patient went to school after her summer vacation she had no attack.

The reported cases of many other physicians will point this same lesson. I am by no means a hobbyist in this matter of eye strain as a causative factor in all functional nervous diseases, but I am a believer in eliminating that as a factor in every case. I have not gone to the length of Dr. Gould, of Philadelphia,, who told me he cured 90% of all his cases of migraine with glasses. His figures exceed mine by a large majority. The reason for this is probably due to the fact that my cases of migraine come to me regardless of the cause. His cases of migraine are sent to him because of a known or suspected ocular defect. I at one time sent him three patients suffering with chronic migraine whom I had been unable to benefit. They were sent to him for the purpose of testing his theory. Not one of these three did he cure.

Another important factor in the causation of functional nervous diseases is chronic constipation and its attendant evil, intestinal fermentation, with its resultant autointoxication. The symptoms which I have seen from this cause have been as varied as can well be imagined. Sleep disturbances are very common. There may be insomnia or sleep disturbed by dreams, while in children we are frequently able to trace night terrors to this cause. Headache, malaise and mental symptoms ranging from irritability and lassitude to melancholia have been observed.

With the intoxication insanities dependant upon a disordered alimentary canal, we have all had some experience, I came near saying some personal experience, for few of us have escaped the mental symptoms known as apathy and disinclination to work, accompanied by some irritability and associated with this same headache. Such symptoms being temporary in character. we have not classified as insanity, but have called them indigestion and constipation, and have cured them by blue pills, salines, abstinence from food and by enforced exercise. But there are cases on record of actual insanities of true intestinal origin. One was by Solders, recorded in the *Jahrbuch für Psychologie*, Bd. xvii.

A woman, when 40 years old, had been constipated for six days, then became suddenly insane, showing a typical picture of confusional mania with excitement. All the symptoms disappeared promptly after the bowel was unloaded.

Berkley records a case of a man 70 years old who, after constipation lasting one week, had an intense headache, this was followed by clouding of mental faculties and the hallucination of a head with a long grey beard beside his own head. Arguments were of no avail. The hallucination persisted until under lavage and saline cathartics he recovered in twenty-four hours and did not relapse.

Epilepsy is largely influenced by the condition of the alimentary canal. So certain am I of this fact that in all my cases of epilepsy I always ask, not only the stock question "Are the bowels regular?" but ask particularly as to the color and odor of the feces.

If these are not normal the patient is put through a course of diet, bowel washes in the knee-chest position and laxatives, until the desired result of a normal stool is attained. A case illustrating this which interested me exceedingly is the following:

In January, 1895, L. B., aged three years was brought to me from Fairport, whose history was as follows: He was one of three children. The others are healthy. In April, 1894, he had a convulsion in which his eyes and head turned to the left. He grew rigid and cold. He had a second one in six weeks; the third in four weeks and in July he had 36 in twenty-four hours. During my first examination he had a stool which to characterise it properly must be called stinking. Its color was very dark. His mother said, "His bowels are regular." My reply was that if they were regular in that way it was no wonder his fits were regular.

He was placed on a careful diet of rice, with bovine, and malted milk. Salol gr. 3, every 2-4 hours, and $\frac{1}{2}$ teaspoonful of liquid beef peptonoids with creosote were given him six times a day. Aromatic syrup of rhubarb was given at night. As his convulsions were so frequent, ranging from 10 to 20 a day, I thought it best to give him a prolonged rest. He was kept off the floor for six months. His attacks became less frequent, until in July, 1896, they ceased altogether, and his mother writes that he eats, talks and walks as other children do. In this case no bromides were given. In fact I took away the bromides that my predecessor had prescribed.

In all my cases of epilepsy I have carefully watched this relation of bowel condition to severity and frequency of seizures, and have found that in a large majority of cases, attacks increased in frequency when the bowels contained feculent stools, or, in other words, when there was intestinal indigestion.

In direct line with this is a paper by Voisin in the *Archive de Neurologie*, 1895. He reports a number of cases that were

treated continuously six months by the bromides alone and then six months by lactose and beta naphthol.

He presents the tables in parallel columns of the number of attacks of grand mal and the vertigo under each form of treatment. A study of these tables shows no increase in the number of attacks during the six months in which the bromides were suspended. He presents in all, 18 cases. In some, these attacks were fewer in number, under the naphthol than under bromides.

He concludes his study of the cases thus:

We believe that the bromides are especially useful in reflex epilepsy. They diminish the excitability of the patient and place him on guard against his attacks. But in general epilepsy of infectious origin (he here refers to infection from the gastrointestinal tract), we believe that the action of the bromide is insufficient.

Repeated purgatives—intestinal antiseptics, with a good hygiene—life in the country with hydrotherapy appears to us to be the basis of rational treatment.

The urine so often indicates the cause of obscure nervous symptoms that its systematic examination cannot be too strongly insisted upon. It has occurred to me in several cases that a patient suffering from unrelieved headaches had consulted me because my predecessor, the physician in attendance, was satisfied that he had done his entire duty after he had found and corrected an astigmatism. It is a fact that many men, and good men too, are apt to cease looking for causes after they have found one cause. An insufficient secretion of urea is a most common cause of nervous symptoms. These may be mental or motor or sensory in character. The three varieties of these symptoms may be removed by a free use of diuretics and daily liberal doses of distilled water.

Insanity of various types has been observed in both the acute and the chronic varieties of Bright's disease. Insanity is much more frequent in the cases with contracted kidney than it is with the large white kidney. The insanity may appear when the presence of albumin is only indicated as a trace in the urine. The most commonly observed form is the confusional insanity, with hallucinations and with restlessness. So important a fact is this that Berkley says: "The presence of confusional insanity nearly always indicates a toxemia from some source and it behooves the physician to make frequent and accurate examinations of the urine in all suspicious cases in order to avoid unfortunate mistakes in diagnosis." We may also have simple melancholia, or a more active melancholia with distinct delusions of persecution, or we may meet with mania and dementia.

Neurasthenia of a melancholic type is often explained by a urine scanty in amount, of high specific gravity, strongly acid and loaded with urates,—in short, the urine of lithemia. A common cause of this condition is an improper diet and a habit of drinking an insufficient amount of water. This peculiar absence of thirst is quite common in neurasthenics. So marked is this that it is frequently harder to get a patient to drink three pints of water daily than to make them take the most nauseous drugs.

Anemia is a frequent cause of headaches, neurasthenia, hysteria and vertigo. It is also so easily discovered that it would be unpardonable in me to more than refer to it before this society, were it not for the fact that it is occasionally overlooked. I will report an extremely interesting case in which anemia,—the cause of all the symptoms was ignored by several able men who had preceded me in the case.

A child was brought to me on account of his having extremely wakeful nights and cross days. He was not only wakeful but noisy. This condition had lasted for two years. The parents were almost worn out. He usually slept until 11, and then would waken very many times till 3 or 4, after which time he remained awake. The physician first consulted was the regular attendant, an able, careful man. He said there must be a reflex irritation and so he had the child circumcised by Dr. Park. This proved of no avail, so Dr. Hinkel was called to examine the nose and throat. These were found in good condition. The penis was again attacked and this time the meatus urinarius was slit but the child still cried on. The gastrointestinal tract was next viewed with suspicion. The stools were examined but the movements were found digested and normal. The food was regulated but all to no purpose. At last the diagnosis was made of a nervous child with excitable cerebral centers, and bromide of potassium was given faithfully at night, for a long period. This however, was unsatisfactory to parents and physicians as the cause was still undiscovered, and finally the case was referred to me. At first glance I thought I saw a well nourished child. The skin was tanned and gave the face an appearance of ruddy health. On taking hold of the child's arms and legs I was struck with the fact that they were cold. A further look at the mucous membranes of the mouth and eyes showed pallor. The brown cheeks from life in the open air had misled six physicians. It was a case of anemia. The symptoms were all cerebral. The blood examination showed the hemoglobin to be 57 instead of 90. He was placed upon iron three times a day and bovine added to his food. The bromide which his physician had given him to allay the cerebral irritation was discontinued. In a month the blood examination showed hemoglobin 67—in two months 77. The irritability and wakefulness disappeared.

The case is thus reported in detail, not because it is a new truth but because it is an old one that needs emphasis; that when

ill behaved nervous systems are caused by a lack of proper nutrition, the irritation will not down with sedatives, but will continue till the need of the missing element is supplied. The nervous irritability and restlessness is simply the cerebral method of expressing what the nerves express by pain, which Hilton said was the cry of a starved nerve for better food.

The Causal Relation of the Pelvic Diseases of Women to the functional nervous diseases must be approached with caution. We must remember that many nervous cases are nervous after the pelvic conditions were completely righted; that women have been told time and again by physicians that if only a lacerated cervix or perineum were repaired or an Alexander's operation performed that the headaches and backaches, nervousness and neurasthenic symptoms would undoubtedly disappear. The operations have been performed with beautiful results, locally, but alas! very often without beneficial results so far as the nervous symptoms are concerned. It has been my experience in the last few years to have a good many women come to me after pelvic operations had been performed, suffering from the same symptoms for which they had undergone operations, in the hope of obtaining relief, proving in their cases there was little or no causal relation between the pelvic condition and the condition of the nervous system. In many cases I have found that there was an element of worry over the fact that something is wrong with the pelvis, and if that worry has been encouraged I believe that it is frequently necessary to invoke gynecological aid.

The safe rule, as it appears to me, is that if there are no local symptoms of irritation it is extremely unlikely that without a local irritation we will have a reflex disturbance. From the fact that in the last 10 years a good many patients have come to me after successful operations by eminent gynecologists, at periods varying from a few months to two years after operations for lacerated cervix or Alexander's operation, with the nervous disturbances unimproved, I have come to the conclusion that the operations, if made, should be made for the local condition only. Then we may save the patient from the blow of bitter disappointment and crushed hopes, as this latter is a mental condition which makes the patient much more difficult for the next man to treat. I do not wish to be misunderstood. I am not arguing against the correction of pelvic disease, or lesions, for that would be folly, but I urge that such pelvic disease should be corrected for its own sake and not make the headache or the insomnia or the irritability of the nervous system the operator's excuse.

As to the relation between pelvic disease and epilepsy, something needs to be said. In my own experience I have not met a case where epilepsy was caused by disease of the uterus or its

appendages. I have seen cases in which the attacks occurred at the menstrual period only, and cases that had them more frequently at that time than at any other. But I have not seen cases cured by gynecological interference. In fact, although the statement is often made that epilepsy is frequently caused by disease of ovary or uterus, yet the tables which show it are absent. Nevertheless, as epilepsy is such a dreadful and hopeless disease, I am loth to yield a single point, and I endeavor to relieve the attacks with the aid of the gynecologist whenever the opportunity affords.

Hysteria and Hysterical Convulsions are, undoubtedly, in many cases the result of intrapelvic disease, and I have occasionally seen cases cured by a suitable operation. It has twice been the operation for the removal of a diseased or prolapsed ovary. While speaking of the causal factor of pelvic disease in nervous diseases of women, it is, perhaps appropriate to refer to the fact that in little boys, phymosis is very frequently a cause of obscure functional nervous disease. This has been recognised as far back as 1870, when Dr. Sayre wrote a series of famous papers upon reflex paralysis due to phymosis. Sayre's cases occurred in boys of from three to fifteen years. The symptoms were paresis of the lower limbs of years' duration; constant and painful erections, amounting almost to priapism in some cases, great mental irritability, inability to articulate properly, insomnia, and the like. Relief, usually complete, was afforded by circumcision, the adherent prepuce being torn off from the glans, and the hardened secretions being removed from behind the *corona*. Similar relief was afforded in the case of a girl by clipping the clitoris. Dr. Sayre also saw similar symptoms produced by the irritation of other nerves. Further investigation shows that the irritation may exist in any part of the body. Thorowgood, for example, reports the case of a girl aged 10, suffering from paraplegia, who, on the second day after the expulsion of many ascarides by an aloetic purgative, was able to run and walk, and a few days later was perfectly well.

Mental Strain from Different Causes. A very potent factor in this relation, I have left until now, as it is the one about which there can be no argument. That worry over business or practice; that prolonged hours of labor; that neglect of vacation, are causes of severe nervous symptoms is within the experience of all. That the symptoms which these causes induce will be largely mental, the records for the insane will show. The mental symptoms from these causes then will range from insanity down to irritability, inability to work continuously, lack of interest, disturbed sleep. Motor symptoms usually are slight, being expressions of brain disturbance. Still we have restlessness, mus-

cle twitching and tremor. Sensory symptoms are headaches and parasthesia. Secretory symptoms are frequently observed in sweating on slight exertion or during sleep. In these cases woe betide the physician who hopes to cure the case with glasses because he finds astigmatism, or by sewing up a cervix because it is lacerated, or dilating it because it is stenosed. He may do all these but the cause must be met, and rest, and rest only must meet the cause of prolonged strain ere we can claim a victory. Perhaps this is especially impressed upon us by the fact that such patients improve so much when they go to a physician away from home. I know my patients from out of town improve, case for case, much faster than do the patients that I treat in their own homes. The case is the same, the drugs and the correction of reflexes is the same, but the element of removal from the duties of the day is more difficult to enforce at home than abroad.

Fright is more potent as a cause at puberty and more with girls than with boys. This is natural, as it is an emotional cause acting on an emotional sex, at the most emotional age. The cause cannot be removed, is a true criticism. But the cause teaches us a lesson. The nerve centres are easily disturbed. Self poise must be taught. Self control must be practised. This can best be done by systematic work, such as is laid down by rules for feeding at certain hours, walks and massage and baths. Accustom the body to obey rules and subject it to mental control, is the treatment of the nervous patient with an emotional nature. We have so many nervous patients among children that the causes are a most interesting study. Aside from the ones already mentioned, I must add poor home management, for the home life of children has a great influence upon their nerve stability. Children who are petted, whose every whim is gratified, and who learn that their parents cannot resist their tears, lose the benefit of discipline which develops and strengthens character, grow up selfish and self-willed, and when the sorrows and trials come which even indulgent parents cannot remove, they may come to a condition of hysteria.

Children who live in homes where they are constantly abused and distrusted, live, many of them, in a chronic state of dread and apprehension which is so closely allied to hysteria that with an exciting cause it is readily developed. Another and potent cause is the improper diet of children. Among the poor it is customary for the parents to give their little ones tea once or twice a day from the time they leave the breast. So common is this that in my dispensary practice it is a matter of routine with me to ask the mothers whose children suffer with chorea, disorders of sleep, habit spasms and hysterical symptoms, "When did

you begin giving the child tea or coffee, and how much does it take?" The majority answer that they commenced to feed them tea and coffee when they were two years old. Others have them in their first year. They drink tea two or three times a day. It has seemed to me, that at the time when the intellectual centres are naturally highly stimulated by the new impressions they are daily receiving through each special sense, when they are acquiring the art of language, when memory is being trained to associate names with persons and things, that it is impossible at this period of cerebral growth and development for children to take these cerebral stimulants without their being potent factors in the development of nervous functional diseases.

Per contra, it is said that many are not harmed by this dietary. I do not think this is proven, for we know that a large part of the poorer population is more or less dependent upon stimulants, and it is impossible to tell what influence their early tea drinking may have had in those cases in which a tendency to neuropathic disease exists, because the early giving of these drinks increases the probability of its development. Other causes of hysteria in children may be fright or other profound emotion. Often it comes as a sequel to severe and exhausting diseases and after trauma.

The causes of nervous disease which we call functional are however too numerous to be separately considered. Those that have been chosen have been taken from the long list of etiological factors, because they are representative and because they illustrate the fact that often obscure cases may be exceedingly simple, if a systematic examination be the rule. Often the man with systematic and careful observation will, by his patience, discover causes which perhaps a more scientific and learned man will overlook. But the able man is the one who recognises the cause. Diagnosis is easy. Even the layman will tell you the name of the disease. He will say—headaches, fits, sleeplessness, neuralgia. But it requires the student trained in careful observation and systematic routine of examination to find the cause and so point out the road to recovery.

525 DELAWARE AVENUE.

The Treatment of Chronic Infections of the Nasopharynx with Benzoyl--Acetyl Peroxide.

By JOHN C. WARBRICK, M. D., Chicago, Ill.

Former Instructor in Medicine, College of Physicians and Surgeons,
The Medical Department of the University of Illinois.

I SEE a great many cases of chronic infections of the nose and nasopharynx in my practice, constituting pathological conditions characterised by hypersecretion, congested, sensitive

mucosa and tendency to coryza; conditions resulting in hypertrophy of the turbinates, deflections of the septum, reflex irritations and a decided lessening of the general tone.

As the conditions described are unquestionably due to passive congestion superinduced by the presence upon the nasopharyngeal mucosa of pathogenic microorganisms, it is clear that what is wanted is a germicide which, while capable of destroying the germs, is not harmful to tissue, as so many of the efficient germicidal substances are. At various times, I have noticed in our literature mention of the use in nose and throat work of the benzoyl-acetyl peroxide (acetozone) first described in the American Chemical Journal, by Novy and Freer, of the University of Michigan. I thought that I would look into the adaptability of this substance to my work and my experiments proved so satisfactory that I have since made use of it almost as a routine measure.

I am satisfied, from my experiences, that acetozone solutions have a distinctly beneficial action in such cases as I shall describe further on. I have used benzoyl-acetyl-peroxide (acetozone) in aqueous solution containing a grain and a half of pure acetozone to six ounces of water, sprayed into the nose by an atomizer; but in the nose and mouth where more prolonged contact is desired than is possible to secure by aqueous solutions, I have utilized an oily solution which holds the germ-killing acetozone in place, adherent to the mucosa.

A satisfactory solution can now be obtained at the chemists under the name of acetozone inhalant, which answers every purpose of the laryngologist. Acetozone inhalant contains one per cent. of acetozone and five-tenths per cent. of chloretone in colorless liquid petrolatum. It possesses the characteristic properties of acetozone—germicidal and innocuous,—as demonstrated by repeated experiments. It is ready for instant use, is practically nonirritating and easily applied, the only instrument required being an oilatomizer.

In the following paragraphs I briefly describe my method of treating such cases. My patients report daily at the office, and as their progress toward recovery goes on, they come every other day, and later need to report only once or twice a week.

In the treatment of nasal catarrh of any character, the nasopharynx should first be cleansed of all accumulated secretion by the use of an alkaline fluid, such as Dobell's solution, or alkathymol, or some such mild solvent of the tenacious and infected mucus. My object is to reduce the irritability of the nasal mucous membrane and to protect it from the various irritants or infective material which produce hydropnea, sneezing, etc., as

well as to render the mucosa an unsatisfactory culture field. I then spray into the nares a liberal quantity of the acetozone inhalant, the excess being removed by the towel or the patient's handkerchief. Of course, appropriate treatment of the general condition is always directed,—laxatives are given, diet and personal regime carefully attended to.

The following notes demonstrate the efficiency of the treatment and the class of cases to which I have applied it:

CASE I. Mrs. F. K., age thirty-three years, by occupation a stenographer, came to me on January 27th, 1904. She stated that she had had catarrh for ten years and that she suffered from hay fever during the season. She complained of profuse discharge from the nares and some accumulation in the nasopharynx; also of a disagreeable taste in the mouth, and stomachic disturbance. She coughed in the morning, raising quite a quantity of phlegmatic expectoration. The face was sallow. In the left naris there was a small spur on the lower and anterior portion of the septum. Both nares were nearly filled with a thick serous exudate. The vocal cords were congested, as was also the pharyngeal wall. This patient received fifteen treatments, after which she was so much improved that she ceased her visits and treatments.

CASE II. Mr. C. A. K., age thirty-five years, visited me on March 13, 1905, stating that his nose and throat had given him trouble for a long time; that there was a continual mucous discharge from the nasopharynx and that he expectorated a great deal of "phlegm" all the time, but this was aggravated in the morning. Had tried various treatments without avail. He smoked three or four cigars daily. The nasal mucous membrane was red and congested and there was a profuse stringy discharge accumulating on the posterior pharyngeal wall. He required ten treatments locally with the regularly prescribed regime to restore his normal condition.

CASE III. Mrs. G. A., aged fifty-eight years, housewife, came to me on August 11, 1905, with a history of having had catarrh for thirty years; an attack of ulcerative pharyngitis, for which she used a gargle, a long time ago; several attacks of bronchitis and one of pneumonia. She was always more or less hoarse and could not sing at all. She also complained of vertical and frontal headaches and pain across the eyes, which were aggravated on rainy days. Sense of smell had been lost for a year. She had a bad taste in her mouth and her stomach was out of order, flatulency, irregular bowels, with occasional crampy pains and a disordered liver. Previous weight, 165 pounds; at that time, 137 pounds.

The nasal mucous membrane was sensitive and there was considerable discharge from the anterior nares and an accumula-

tion of mucus in the nasopharynx. Heart normal, liver slightly enlarged.

The patient had received treatment for years without any benefit to her nose and throat. She received twenty-three treatments, both local and general, and at the time of her dismissal was greatly improved.

TRANSLATION.

On Some New Local Anesthetics.

By PROF. DR. H. BRAUN.

Translated for Buffalo Medical Journal, from Deutsch. Med. Wochenschrift, 1905. No. 42.

BY means of a few researches upon his own body or upon the healthy, a person adapted for self observation may within a few hours get his bearings very accurately upon the local action of a new remedy. These simple researches, the method of which I have depicted in my manual (*Die Local Anästhesie*, etc., Leipzig, 1905), are harmless in the case of remedies whose general pharmacological qualities have already been investigated, and allow us for the most part the possibility of being able to state in respect to a given remedy submitted to us whether and in what direction practical researches will pay us or not.

The qualities which a local anesthetic must possess,—apart of course from the faculty possessed by many substances for anæsthetisation,—are as follows:

1. It must in relation to its local anesthetic potency be less toxic than cocain. We may therefore speak of a relative and absolute toxicity. Most of the substances recommended as substitutes for cocain are indeed less toxic, possessing a slight absolute toxicity, but corresponding to this there is a slighter anesthetic action, so that the relative toxicity is not less than that of cocain. The relation of their toxicity to that of cocain may readily be determined by animal experiment, and it appears that this relation can be straightway applied to man. The importance of this first condition is much overestimated. One should not forget that most of the forms of application of cocain when properly carried out are free from danger. It is only in spinal anesthesia that cocain is surpassed by other remedies, and here the ill collateral effects are at least for the most part not dependent upon its toxicity in the ordinary sense of that term.

2. The remedy should not exert the least irritant action, nor cause the slightest injury to the tissues. Like cocain, tropacocain and eucain it must be absorbed without causing after effects at the site of application, as hyperemia of a disturbing grade, inflammation, infiltration or necrosis. Only then are we justified

in assuming that the healing of the wound is not unfavorably influenced, and that no other injury occurs. Substances which have a strong acid or alkaline reaction are therefore to be excluded in advance, because they invariably cause local damage to the local tissues. Upon this important second condition very many new remedies have been wrecked.

3. The remedy must be soluble in water, and its solutions must be permanent to a certain extent. It is very desirable also that the solution should be sterilisable by some simple method. Cocain as is well known falls short in this respect.

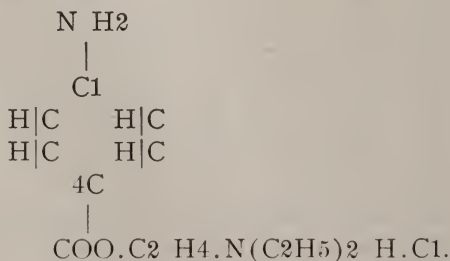
4. The remedy must permit of a combination with suprenin, without exerting any deleterious action on the vaso-constrictor action of the latter. All substitutes for cocain hitherto introduced do not fill this requirement; they either entirely abolish the action of suprenin or cause notable disturbances. In order therefore to be able to utilize fully the local action of small doses of suprenin, cocain alone can be combined with the latter.

In definite forms of application other things come into question. For application to mucous surfaces an anæsthetic should have the power of rapid penetration. The anæsthetising power is dependent upon this factor in the first degree. Just here cocain possesses an immense advantage over other substances. Finally the qualities necessary for a spinal anæsthetic can not be reduced to a formula. The principal and collateral action of remedies when injected into the spinal canal are not as yet sufficiently known.

Within a short time the chemical houses have introduced three new local anæsthetics,—namely, stovain, alypin and novocain. The latter alone is considered here:

NOVOCAIN

The chemical properties of this substance, which was discovered by Einhorn and has been placed at my disposal by the Farbwerke are here described for the first time. They are as follows: novocain is the monochlorhydrate of p-amino-benzoyl-diaethyl-amino æthanol with the formula:



The salt crystallises from alcohol in needles which melt at 156° C. It dissolves in water in proportion 1:1; and in cold alcohol 1:30 (the description and pharmacology are given word for word with Biberfeld's account.) The author's own tests of novocain gave the following results:

1. 0.1% isotonic solution of novocain. Formation of a cutaneous wheal on the forearm. Injection painless. The anesthetic action like that of tropacocain, was of very short duration, and in from 3 to 5 minutes cutaneous sensibility returned. No hyperemia. The wheal vanished without leaving a trace.

2. 0.5% and 1% solutions novocain. Formation of cutaneous wheals. Injection painless. Duration of wheal anesthesia 15 minutes. Wheals vanished leaving no trace. No hyperemia.

3. 5% and 10% solutions novocain. Formation of wheals. Injection of 5% solution painless; 10% solution produced very slight irritation. Duration of anesthesia 17 and 27 minutes respectively. Very slight hyperemia at site of injection. Wheals vanished. No infiltration or tenderness remained.

4. 1% novocain solutions. 1 c.cm. injected simultaneously into forearm in region of superficial radial nerve. Soon after the skin over the injected area showed diminished sensibility. No distinct evidence that the peripheral nerve terminals were anesthetized.

5. 0.5% novocain solution. Constriction of little finger with rubber tube. Injection of 1 c.cm. solution circularly into the subcutaneous tissue of the first phalanx. After 11 minutes entire finger completely insensible. Rubber tubing removed. In 5 minutes sensibility had returned. No swelling or sensitiveness remained in finger.

We have to do therefore with a local anesthetic with a strong, yet in comparison with some others, a transitory action, like that of tropacocain. In order to obtain results comparable with those from cocain, it would be necessary to use concentrated solutions and large doses in proportion to the slight toxicity of novocain. However, this necessity is readily and successfully overcome by the addition of suprarenin to the novocain solutions.

6. 0.1% isotonic novocain solution. To 100 c.cm. added 5 drops 1:1000 suprarenin solution. Formation of cutaneous wheals on the forearm. Injection painless. Very marked anemia. Duration of anesthesia more than an hour. No reaction of any kind.

7. 1% novocain solution, each c.cm. of which contained 2 drops suprarenin solution 1:1000. Formation of wheals on forearm. Anesthesia extended far beyond the limits of wheals.

Duration nearly four hours. Marked suprarenin anemia, upon subsidence of which some after pain. No other reaction.

8. $\frac{1}{2}$ c.cm. of the same solution injected beneath skin of forearm. The skin over the site of injection as well as in the course of the sensible nerves was anesthetic for 2 hours. Marked suprarenin action. No reaction.

9. $\frac{1}{2}\%$ novocain solution with addition of a drop of suprarenin solution 1:1000 to each c.cm. One c.cm. injected beneath the skin of the first phalanx of the fourth finger. In 10 minutes finger anesthetic and anemic. Sensibility began to return in 65 minutes. Another hour elapsed before complete return of sensibility. No after pain.

The apparent superiority of novocain-suprarenin solutions to cocain-suprarenin solutions, at least for tissue injections, has been abundantly confirmed by clinical experience. The author has used novocain in 150 operations in which the cases were adapted for tissue injections. Among these are represented: The anæsthetisation of the entire external nose (30 c.cm. solution, No. 2), the extirpation of a cancer of the scalp the size of the palm of the hand, including repair of the defect by skin transplantation from the arm, uranoplasty, staphylorrhaphy, enterostomy, laparotomy for tuberculous peritonitis, operation for inguinal hernia (Bassini's method), castration, hydrocele operation with removal of the tunica, and the like.

The majority of the operations were upon the hands and fingers for injury and suppuration, incisions, exarticulations of fingers, etc. There were numerous extractions of teeth. The anæsthetisation of the inferior alveolar nerve and lingual nerve succeeded with novocain as well as with cocain. With 5 c.cm. novocain solution No. 4, the suprarenin being reduced to one half, the entire alveolar process of the upper jaw could be rendered anesthetic at once, which result cannot be accomplished with cocain. When the latter is used for wholesale extraction, two sessions are necessary.

The author has never seen any toxic collateral effects from novocain, although he has repeatedly used as much as 0.25gm. the maximum dose for mankind is doubtless somewhat larger than this. Local irritation was never noted. Concerning anæsthetisation of mucous membranes as well as spinal anesthesia with novocain the author's experience has been too small to draw conclusions. With a 10% solution each c.cm. of which contains 2 drops of suprarenin sol. 1:1000 the nasal mucosa was rapidly and deeply anesthetised. In a few cases of spinal anesthesia 0.05 gm. with 3 drops suprarenin sol. 1:1000, good and prolonged anesthesia of the anal and perineal regions was ob-

tained; and with 0.1 gm. with 6 drops suprarenin sol. 1:1000 the anesthetic area reached Poupart's ligament. In 2 cases there was slight meningeal irritation afterwards thought due to the suprarenin, which was perhaps not indicated.

SELECTION.

Prostatic Hypertrophy Treatment.¹

[*St. Louis Courier of Medicine, July, 1906.*]

CONCLUSION.

Previous to the accomplishments of the renowned McGill, of Leeds, the treatment of prostatic obstruction was principally palliative; the medical attendant advocated catheterism in practically all of these cases, since it seemed to yield results far superior to those obtainable by other methods. Today, however, the one important and pressing question presenting itself for prompt decision in every case of prostatic obstruction, is: is the medical attendant justified in introducing this sufferer to catheterism, with all its attendant dangers, distressing, and often fatal, complications, when prompt and proper surgical intervention,—operation before the appearance of septic cystitis, renal infection, renal insufficiency, or other conditions which destroy the patient's health,—yields the safest and the most satisfactory outcome? Personally, I can not help but feel that when the pathologic changes in the prostate have reached such a stage that it is necessary to subject the sufferer to the dangerous and merely palliative treatment (regular catheterisation), certainly the condition fully warrants prompt surgical intervention (radical removal of the diseased tissue); hence, I am sure that Dr. H. G. Mudd is taking a decidedly advanced step in the right direction when he says:

“In my opinion the safe plan in the great majority of the cases would be to remove the offending organ with the first alarm sounded by the symptoms of obstruction.”

The consensus of English opinion is tersely expressed by Sir Frederick Treves when he says:

“As long as a patient with enlarged prostate can live in comfort with the occasional use of the soft catheter, no operation is to be advised. But when catheterism becomes increasingly frequent and difficult, the question of radical operation has to be considered. Recent experience has shown that the risk of prostatectomy is much less than it was formerly considered to be; and further, that the complete removal of large adenomata which usually form the obstruction is attended by results with which those following partial excision can not be compared.”

1. See p. 715, July, 1906, issue of this Journal.

Syms feels that operation is indicated:

1. When the patient suffers from obstruction which necessitates very frequent urination to a degree which entails exhaustion.
2. When he suffers from repeated attacks of acute cystitis, or from a marked degree of chronic cystitis.
3. When bladder stone is caused by prostatic obstruction.
4. When frequently repeated hemorrhages occur.
5. When the pain tends to undermine the patient's health.

A careful study of the pathology and clinical manifestations of prostatic hypertrophy, and of the literature concerning the treatment, clearly demonstrates the fact that the results of palliative treatment are absolutely unsatisfactory—in many instances the dangers accompanying their application far exceeds the dangers attendant upon early prostatectomy. Concerning the chief dangers of radical operation Mudd says:

“The chief danger of prostatectomy now lies in the fact that the condition of the patient coming to operation is such that any surgical interference is a matter of great gravity.”

Renal insufficiency is looked upon by many surgeons as a distinct contraindication to radical operation. Concerning some of the contraindications Fuller says: “Putrid urine and the presence of an ascending pyelitis together with some involvement of the kidney, should not stand in the way of operation, but their existence should strengthen the plea for speedy relief of the prostatic obstruction, the direct cause for their presence and combination; radical operation is often followed by perfect recovery.”

Such antique and unscientific treatment as ligation of the internal iliac arteries, castration, vasectomy, angioneurectomy, etc., have, thank heaven, sunken into unmoaned and unhonored graves. Robinson sought to perform prostatotomy by way of the rectum, while Harrison performed external perineal urethrotomy, and then inserted the knife into the prostatic urethra, dividing the prostatic bar on the floor of the gland, then he forcibly stretched the prostatic urethra with his fingers or a sound. Mercier devised the prostatome for cutting the middle lobe of the gland through the urethra. Gouley presented an instrument for cutting or punching out segments of the enlarged gland; the instrument was inserted through a perineal incision. Maisonneuve devised an instrument whereby he was enabled to incise the prostate through the floor of the urethra. In 1877 Bottini, of Italy, modified Mercier's instrument in so far as to produce a galvanocautic incision which burned instead of cut. Freudenberg greatly improved Bottini's instrument. More recently Chetwood has presented a similar

instrument which he introduces through a perineal incision. The advantages of the Chetwood instrument are quite obvious; the bladder can be carefully explored with the finger before the instrument is introduced; the operator clearly knows what he is doing; and it is claimed, that the operation is applicable in almost all cases. In former years suprapubic prostatotomy was frequently resorted to; it is a fact that all of these methods are palliative, and have many objectionable features,—in many instances they have been resorted to simply because the patient's condition prevented radical operation.

And now we come to the recently much-discussed and, I think, ideal treatment,—excision of the diseased prostate. Previous to 1886, prostatectomy for the relief of urinary obstruction was an operation that was unknown. Mr. McGill, of Leeds, not only originated the operation, but improved and perfected it. In fact, the medical world looks upon Mr. McGill as the father of advanced prostatic surgery. McGill began by removing small pieces of the prostate in an unscientific way through the bladder after a suprapubic cystotomy. The perfected operation was as follows: After having performed suprapubic cystotomy and sutured the bladder to the abdominal parietes, he then inserted curved scissors through the incision and snipped through the membrane over the projecting portion of the prostate, completing the operation by enucleating the gland with the fingers and forceps. The bladder was drained suprapubically, the bladder having previously been irrigated with water so hot as to make it uncomfortable for the hand. Bellfield modified McGill's technic by advocating the additional operation of perineal urethrotomy to facilitate drainage, while Fuller advised counter-pressure by means of the fist against the perineum. Of late Freyer has reported excellent results with suprapubic prostatectomy—according to an editorial in the November, 1905, issue of the *Buffalo Medical Journal*, the technic employed by Freyer is that advocated by Fuller; in fact, Freyer is severely criticised for failing to credit Fuller with the technic.

To Nicoll belongs the credit of having been the first to devise a well defined perineal operation for removal of the diseased prostate. Nicoll's technic was the following; after performing suprapubic cystotomy and attaching the bladder to skin, an incision was then made in the perineum, similar to that in perineal urethrotomy, and a second one at right angles to it in front of the anus, forming a T. Nicoll then dissected up in the perineum anterior to the rectum as far as the prostate, and having cut through the capsule he inserted his right forefinger between it and the gland; the fingers of the left hand were employed to make counter pressure from above, while enucleation was being performed by

the right forefinger. Nicoll drained through the urethra by means of a retained catheter without performing urethrotomy. The lower wound was packed with gauze; the sutures holding the bladder and abdominal wall in apposition were then removed, and the bladder allowed to fall back into the abdomen.

Later, Alexander, advocated going into the prostate through a perineal incision made into the membranous urethra up to the apex of the gland; the capsule was then incised and the finger inserted in the latter for enucleation. Counterpressure through the suprapubic cystotomy incision was employed. Both suprapubic and perineal drainage were employed.

Syms attempted to obviate the necessity of suprapubic cystotomy by inventing a rubber retractor. This hard rubber tube with a soft rubber balloon at the end is too well known to require further comment. Recently Syms has reinforced the rubber balloon with a canvas lining. In 34 cases Syms has found it perfectly satisfactory.

More recently, Young has presented an excellent modification of the metal refractor of the French. Young contends that no important structures are injured by his technic, and, the entire exposure of the prostate is by incising the skin and dividing the central tendon and the insignificant recto-urethralis muscle beneath it in the median line,—(both of which are necessarily severed in all perineal exposures of the prostate) the remainder of the operation is done by blunt dissection with the forefingers. The levator ani muscles and other important structures are merely separated and held apart by retractors so that no more injury is done than in other perineal operations. Young claims that the entire operation is under the eye of the operator; that the sexual powers will be preserved; that proper attention can be given the urethra and to the ejaculatory ducts,—in a word he feels confident that it is the most simple and most satisfactory technic.

It must be admitted that many surgeons highly commend the Young technic. Mudd feels that the method advocated by Young is the operation of choice; the whole operation can be done quickly and deliberately under the guidance of sight and touch. His objection to the Bryson technic lies in the fact that there must necessarily be wide destruction of the prostatic urethra, and the uncertainty of completeness; the bladder and the rectum are frequently torn into.

Today we find the English clinging to McGill's technic, the Germans lean toward the Bottini-Freudenberg instrument, while in America the perineal technic is constantly gaining ground. Personally, I can not help but feel that no one operation is suitable for all cases, so much depends upon the site and character of

the obstruction, and the general condition of the patient. Just as soon as the medical attendant fully appreciates the fact that the distressing results of palliative treatment can be prevented by a more safe procedure,—one that yields satisfactory results,—just so soon will we see the best results of prostatectomy.—E. A. BABLER.

PROGRESS IN MEDICAL SCIENCE.

Orthopedic Surgery.

Reported by PRESCOTT LE BRETON, M. D., Buffalo.

BIER's passive congestion treatment is steadily gaining in popularity, and is now being employed in this country. A summary of recent literature is as follows: Bier uses three means to produce hyperemia,—hot air, constriction and suction. Hot air treatments are reserved for chronic joint cases where there is no infection or where the infection has ceased; for example, old rheumatic joints, arthritis deformans, or gonorrheal joints.

For constriction, a rubber bandage or sometimes a rubber tubing is wound about the extremity on the proximal side of the part to be treated. There are two entirely distinct methods. The first is to apply the constriction for one or two hours a day for tubercular joints. The second to apply the bandage for twenty to twenty-two hours a day for all other kinds of conditions. The rules governing the first method are:

Apply flannel from below up to the joint; above the joint apply a layer of gauze, and over this the rubber or elastic cotton bandage.

The constriction should produce a venous stasis only; the limb must be warmer than the opposite one, and red. Not cold and blue. No sensation of pins and needles allowed. Change the area for the constriction if possible; apply the bandage as far as possible from the diseased joint.

If a cold abscess appears, open by a small incision, do not scrape or pack, but change the treatment to the suction cup.

Use no fixation for the joint: begin passive motion almost at once; leg cases require stiling (apparatus to prevent the weight of the body from falling on the affected limb).

The contraindications are amyloid degeneration of the viscera; consumption; the presence of an abscess.

For suppurative cases the suction treatment replaces the constriction. If the abscess has not broken, it is opened and variously sized cups are applied in the following way: a little lanolin is rubbed on the skin about the sinus to make the cup hold well.

The cup is used for five minutes, then taken off for three minutes. This alternation is kept up for forty-five minutes, once daily. The discharge becomes serous and the granulations become red and firm instead of pale and flabby. The treatments are then given every second to fifth day until the sinuses are healed. The hip and knee, on account of the depth of the focus, seem to be the only unfavorable sites for this treatment. Other joints yield rapidly and the results claimed are surprising as regards rapidity of healing, return of motion and of power. The cups are similar to dry cups, with an opening over which is a rubber bulb, which produces the suction; all shapes and sizes are used, to better fit the area involved.

The method of prolonged constriction, to induce a nearly constant passive congestion, is employed for all conditions other than the tubercular, and is combined with the suction treatment by cup, if there is a discharging wound. The constriction is continued for twenty or twenty-two hours out of the twenty-four. Great edema and discoloration are produced, which subside rapidly during the short period of rest, when the part is elevated. The constriction point must be changed often; an inflated rubber tube may be made to replace the Esmarch bandage; about the neck a cotton elastic bandage may be used, and the face becomes bloated and bluish. It is easy to do too much or too little with this prolonged constriction, hence the advice to begin with the furuncles and later undertake cases of greater gravity. For the suppurative cases, incise early making a small opening; use no drainage or packing; cover with a light dressing; apply the suction treatment. Constriction about the neck is advised for cases of diphtheria, sore throat, mastoiditis, erysipelas, jaw abscess, glandular abscess, and the like. In the extremities, constriction also is advised for fractures, suppurative processes, (especially of a superficial nature), teno-vaginitis, gonorrhoeal arthritis.

Reasons for the curative action of the congestion are:

Bactericidal effect of the serum.

Fibrous tissue is more rapidly formed.

Exudates and blood clots are quickly removed after the congestion is discontinued.

The toxins are diluted by the inundation of serum.

Advantages of the method:

It is cheap, easy to use, devoid of danger except where prolonged constriction is given for acute troubles.

It relieves pain markedly.

It prevents ankylosis.

It dispenses with fixation.

A small scar is left, and painful dressings are dispensed with.

Goldthwait and Osgood, (*Boston Medical and Surgical Journal*, May, 28, 1905,) consider the pelvic articulations, from an anatomical, pathological, and clinical standpoint. They are true joints with a slight amount of normal motion, which is increased during pregnancy and in certain other conditions. The causes giving rise to symptoms, are: excess of motion during pregnancy or the menses; traumatism, from falls, or lifting, or the drag of a pendulous abdomen; general lack of tone; infectious diseases; arthritis deformans. The symptoms are: backache, local tenderness, muscle spasm, atrophy of buttock or thigh, and abnormal motion at the symphysis and sacroiliac joints, except in arthritis deformans, where there is no motion obtainable. The backache is referred to the sacrum, over the hips, or down the thigh along the sciatic. It is worse after exercise or on sudden jarring. It is apt to be worse in the night, because in lying on the back the lumbar curve is lessened and strain is brought on the joint. The tenderness is located over the articulations. The muscle spasm limits the normal spinal motions; prevents free forward bending; hinders the raising of the knees as in going up stairs; and may cause the adoption of various postures to relieve the joints.

Abnormal motion may be detected by the following tests: as the patient stands, place the hands over the symphysis and sacrum, and ask him to raise each knee alternately; placing the thumbs on the sacrum and the hands on the crests of the ilium, have the patient repeat the motion: then have the patient lie on the side, and hyperextend the thighs, one at a time, and feel for motion of the ilia on the sacrum. When arthritis deformans has attacked the joint, of course there is no motion. The proximity of the sciatic nerve causes symptoms of sciatica in addition.

Rest and fixation are the principles in treatment. A plaster of paris jacket, often including one thigh by a spica, is the rule. Sometimes rest in bed is advised at first, with a pillow under the lumbar lordosis. Again pressure against the upper sacrum is necessary, or the jacket has to be applied with the patient on his face, so that the sacrum is in normal position. One should remember that during the giving of an anesthetic these joints may suffer strain as the patient lies on a rigid table. Still again a leather jacket, woven trunks, or a pelvic belt will control the symptoms and backache. In the infectious conditions, or tubercular involvements, the joint may have to be opened and scraped. The writers consider that the cases are common, and often overlooked and that the backaches are ascribed to sciatica and rheumatism too often.

ABSTRACTS.

The Probilin Treatment of Cholelithiasis

IN May, 1904, Dr. W. Bauermeister published in the *Therap. Monatshefte* his results from the treatment of gallstone disease with probilin, a pill composed of acid sodium oleate, salicylic acid, menthol and phenolphthalein. Salicylic acid is an acknowledged cholagogue and biliary disinfectant; acid sodium oleate is also a recognised cholagogue; menthol is an analeptic and carminative; and phenolphthalein stimulates intestinal activity.

Since then, four years ago, he has seen probilin give brilliant results in the very severest attacks of cholelithiasis. But he bases his conclusions of its efficiency only upon cases that he treated two years ago or longer. To 80 such patients, mostly dating from 1902 and 1903, he sent letters of inquiry, so as to get their own opinions; for gallstone disease is an affection concerning which the sufferer can judge with great exactitude whether his malady has persisted. The following questions were put: Have you been cured? If so, by what? Or, do you feel much or only a little improved? Or, have you noted no effect whatever?

To these 80 inquiries 42 answers were received. Doubters may claim that the missing replies represent polite disapproval; but such is not his opinion. The few disapprovals came in first; for the public nowadays is much quicker to blame than to praise. Besides, he knows positively that quite a number who failed to answer are in good health and entirely free from trouble.

Four patients disapproved of probilin. One was a gentleman who suffered severely from cholelithiasis for about five years and who, after trying everything, was operated on $2\frac{1}{2}$ years before he tried probilin. Soon after the operation his old troubles reappeared, and he claims that probilin had no effect. His present freedom from disease he ascribes to some household remedy, whose nature he would not reveal. The second patient did see some results from probilin, but they did not endure. It was only after using tea and oil that she passed 21 stones, and since then she had no pain. I am doubtful as to the passage of concretions, since the examination of the so-called calculi passed under oil treatment shows that they are merely saponified masses found in the intestines, not stones. The third patient also says he got relief after oil treatment. The fourth patient states that even after the probilin treatment attacks occurred at intervals of 6 to 8 weeks. She had other treatment after it, including the Neuenahr and Carlsbad, without avail.

Seventeen patients replied that they were improved or greatly improved and consider their present condition fairly good or

very good. Most of them have been through varied methods of treatment, so that we must lay special stress on the improvement they note. Experience has taught them to be cautious enough to speak only of improvement, even if they have had no attack for a year.

Twenty-one patients state explicitly that they are cured; that is, that since the first probilin course,—in many cases taken three years before,—there has been no sign of the disease. Some of these cases were light, but many of them were severe, and for not a few the operating table was already waiting.

Thus 4 patients were not influenced, 17 were improved, and 21 were entirely cured. Similar results have been reported to me by other physicians. We see stones voided under probilin with a frequency entirely unknown under other medication; colic with the passages is usually light and may be absent, though sometimes it is marked.—*Therap. Monatshefte*, March, 1906.

Therapeutics of Pyrenol.

DR. F. WALTHER, of Leipzig, (*Therap. Neuheiten*, No. 3, 1906) reviews the reports on pyrenol published by Ewald's clinic, Redtenbacher's division, Schlesinger, Gruenfeld, Koehler, Silber, Burchard, Komor, Sternberg, Fasano, Maramaldi, Steiner and others. Pyrenol is chiefly expectorant, sedative, antipyretic and antirheumatic. It does not affect blood pressure and pulse, as almost all salicylates do; on the contrary, it is tonic and stimulant. Stomach and intestines are in no way injured even by its continued use; the appetite improves. All authors are agreed that it has no untoward effects of any kind.

Its most striking results are seen in asthma, where it produces material relief, even of dyspnea. Secretion is lessened and the attacks are rendered milder and often checked altogether. It is almost as valuable in pertussis, diminishing the number and the intensity of the spasms. It acts exceedingly well in croupous and catarrhal influenza, influenzal pneumonia, acute bronchitis and typhoid. Here its antipyretic action is supported by its expectorant and analgesic virtues.

Its content of salicylic acid, which is chemically combined to a readily soluble salt, makes it especially useful in articular and muscular rheumatism, gout and, in larger doses, in neuralgias. Finally, Walther states that pyrenol is used with benefit also in cardiac neuroses and subjective difficulties occasioned by cardiac affections. The average adult dose is $7\frac{1}{2}$ to 15 grains t. i. d. In pneumonia and typhoid $7\frac{1}{2}$ grains every three hours are given; children get one-half and infants one-fourth of this dose in cold water, milk, and other vehicles.

CORRESPONDENCE.

Dr. Eugene A. Smith Tells of Appendicitis Being Discussed in the European Centers.

Editor Buffalo Medical Journal.

SIR:—It is interesting to note the culmination of the discussion of appendicitis, which has been warmly under way in European centers of medical teaching for some months. It reminds an American surgeon of the public and scientific discussion of this disease during the past ten years at home, culminating two or three years ago in general acquiescence in its surgical treatment.

In Great Britain and on the continent treatment of appendicitis is now changing from the ultra conservative or non-operative to the radical, or to use a better phrase, the surgical treatment. Moynihan in England, Hartman in Paris, and Kocher in Berne, all of whom I met, are the advocates of early diagnosis and early operation. A German army surgeon, an *aberstabs arzt*, told me that cases of appendicitis are now frequently brought to early operation in the German army, which is doing very well for Germans who formerly called appendicitis the American disease.

That the laity have also reached a certain phase of education in the pathology of the disease is shown by incidents coming under my observation. On the train lately an English lady of education cautioned her ten-year-old son, to whom I gave an orange, not to eat the seeds for fear they might cause appendicitis. The innkeeper at Berne, not knowing my profession, in talking of hygiene in general prompted by my inquiry as to the Berne drinking water, gravely said, "It is a pity one cannot now eat cherries whole as we did formerly, because of fear of death from appendicitis."

The pathology of appendicitis is discussed here as we discuss it,—namely, as a primary bacterial disease with various predisposing causes. But the need of a close study of its symptomatology with a view to early differential diagnosis from other abdominal diseases is not generally well recognised. It follows that the majority of cases of appendicitis coming for operation are late cases, with perforation, gangrene, general peritonitis or localised abscess. Several operators told me this is the fact.

I saw five cases of appendicitis in Kocher's wards while at Berne. Two were operated upon early without drainage. Two were drained as pus cases. One came to post mortem because of general peritonitis due to perforated appendix, abdominal incision with multiple drains having been vainly tried immediately on reception of the patient.

In a well known English clinic I saw a case of appendicitis treated by incision and drainage of an abscess in the iliac fossa. The patient had entered the hospital two weeks before in the first twenty-four hours of acute abdominal illness, it being the second attack of the same kind. Typhilitis was diagnosed on his entry. Pulse, temperature, respiration, blood count and clinical history plainly indicated acute appendicitis. Operation finally became imperative after two weeks of waiting for an interval operation, and of course was far more hazardous than early operation would have been. In another clinic, under the observation of a famous surgeon, a boy of fifteen entered the out-patient department with a history of eighteen hours of acute abdominal pain, rapid pulse, and high temperature, and with a history of a similar attack eight months previously. A diagnosis of appendicitis without perforation or pus formation was made and he was sent to the ward to await developments, preparation for operation being ordered if the symptoms became more urgent in the next few hours. Marked improvement soon developed and on the third day he was discharged as cured without operation.

At a crowded meeting of the Berlin Medical Society last week appendicitis was discussed by many of the leading German surgeons including Israel, Krause, Landau, and Olshausen. All were agreed that a certain percentage of cases of appendicitis pass through one or more attacks without the need of an operation, and if relapse does not occur within two years of a first attack, the likelihood of a second seizure is small. But this consolation, if it is one for nonoperative treatment, is disturbed by the fact that 50 per cent. of patients having an attack have a second one within a year. To sum up a long discussion, it was agreed that a prognosis cannot be given as to a favorable or unfavorable termination of an attack in a given case and, therefore, the early operative treatment is the safest.

On several occasions quite flattering commendations of the advances made by American medicine and American surgery were made to me by men whose opinions we respect. But Kocher gave us the most sincere praise in a lecture to the surgeons of the Swiss army corps in their annual course, which I had the pleasure of attending during the last ten days. Lecturing on appendicitis, he dwelt on American work and illustrated his lecture by exhibiting the plates from Kelly's book on this disease.

While it seems to me that American surgical thought and method are distinctly in advance of the European in the discussion and treatment of appendicitis, I do not wish to be considered as saying we have reached the end of our endeavors. We still have to convince many medical men by repeated proof that

early operation is the treatment for this disease and we still have some who are dilatory, if not negligent, in the early differential diagnosis of appendicitis. The majority of American medical men, however, are agreed on this subject, but in Europe only the leaders seem agreed, while the rank and file are apparently still to be convinced and educated.

EUGENE A. SMITH.

BERNE, AUGUST 1, 1906.

TOPICS OF PUBLIC INTEREST.

Safeguards to Protect the People from Quack Doctors.

Exposures of Medical Frauds Do Little Good—General Spread of Education the Best Means for Overcoming Native Credulity.

BY CHAMPE S. ANDREWS,

Counsel for the Medical Society of the County of New York.

(*New York Tribune, Sunday, August 5, 1906.*)

“ONE would think that with the spread of scientific knowledge fewer people would be taken in by quack doctors, yet it has apparently made little difference with the prosperity of these frauds,” continued Mr. Andrews. “The man or woman who would laugh at the ‘ramcats’ and ‘well-my-gristle,’ with which ‘Dr.’ Thompson victimized New Englanders a century ago, is as likely today to buy a piece of red flannel denominated a liver pad or to invest in a pair of ‘magic boots.’ And the field is so lucrative that our detectives are always busy in the campaign against these medical crooks.

The average American does not think very far. He reads in his favorite paper about the discovery of radium or the X-ray and some of the wonderful properties of these curious *substances* and radiations. It has nothing to do with his business, so he does not think further about the discoveries. His curiosity has been satisfied, and that is enough.

It is different with the quack. Every time a new scientific discovery is reported in the press thousands of quacks are made. Think of the radium and electrical frauds which have been successfully perpetrated. The quack is keen witted, as he must be in order to succeed. He knows how to make what knowledge he has count. It is business with him. In his shrewdness he has learned to adapt his methods to the times, and that the way to succeed is to imitate true scientific methods. He must at least be so plausible that he will overmatch the half knowledge of his victims. The very fact that science is advancing is a part of his stock in trade, for the general knowledge of this fact fits his prey

to accept his statements about the wonderful new remedies based on the latest discoveries in science.

The well known medical fraud who died the other day after serving a term for swindling a Mount Vernon man is an illustration of the evolution of a reputable physician into a swindler, and how the great scientific discoveries may be turned into the service of the quack. After passing through an American college with honors, this future quack went to Europe and made special studies in medicine. When he came back he became a member of the County Medical Society. His ability was such that he sometimes addressed the society on medical topics. He was considered so learned that he was decorated by a foreign society.

The legitimate practice of the medical profession, however, did not promise to give him wealth speedily enough. In course of time he was expelled from the County Medical Society for questionable practices. He accumulated several fortunes, and was once president of the Road Drivers' Association. On one occasion he was toastmaster of a banquet at which Admiral Dewey was the chief guest.

USED KNOWLEDGE TO SWINDLE.

He used his skill and knowledge to dupe men and women. For instance, he invented a machine which he called a dynostat. Note the scientific character of the name. This he described in the circular which he issued as 'A New Electrical Force that Gathers and Intensifies the Strength of Drugs and DRIVES THEM INTO ANY ORGAN.' Here is a copy of the circular. Here are some of its statements:

"Science in the course of its marvelous advancement has placed within our reach a means of using both drugs and electricity, each in its best and strengthens the other and the one helps and strengthens the other, with the result that previously hopeless cases *get* well and *stay* well. By means of the dynostat we are enabled to reach easily and medicate *perfectly* and *harmlessly* organs of the body without the use of stomach drugging, and to reach and cure diseases that neither electricity, galvanism or drugs could heretofore possibly cure. It is a marvel of electrical skill. Its use in conjunction with the proper remedies, is one of the most startling discoveries in medical science at the present day. It is as wonderful, from a medical point of view, as the X-ray was from a scientific point of view."

There is a plausible display of scientific knowledge for you! Note how he carried this argument to a logical conclusion. 'By means of the ray,' the circular continues, 'light is made to penetrate bodies heretofore impenetrable by light.' Observe the black faced type of the circular in which what follows is printed. If you have had your doubts of the greatness of the discovery

before now have the proof, that the type seems to say. The circular says :

"By means of the dynostat certain drugs may be driven clear through a person's body. For instance, a solution of methylene blue, painted upon the abdomen of a person will, in five minutes, under the influence of the dynostat, disappear entirely, and by a reversal of the current, the same drug may be made to appear on a patient's back. Thus, it will be seen, the dynostat has the power not only to drive a drug into the system, but to draw it out as well. The dynostat can in many cases (by reversal of current) draw out disease and disease germs, the same as it does in the case of coloring matter or drugs.

An indubitable proof of the penetrating power of drugs used in conjunction with the dynostat is the fact that if a patient with a cough and expectoration is operated upon by it, in five or ten minutes the coloring matter that has passed through the body and into the lungs will appear in the expectorated sputum."

That fraud knew that there was nothing like showing a prospective dupe that the instrument would do something.

'Seeing is believing,' was his argument.

CLIMAX OF CAREER IN JAIL.

The climax of his career came a year ago, in January, when he pleaded guilty to a complaint brought by a Mount Vernon man whom he had swindled out of \$10,000, and began the service of a sentence of imprisonment of four months. The game he worked on the Mount Vernon man was this :

A couple of years ago, perhaps, the West Chester man received a visit from a man supposed to be a life insurance agent. The latter persuaded him to apply for insurance. He was examined, but was not accepted, according to the insurance agent, who was in league with the inventor of the dynostat, because of his physical condition.

'I can introduce you to a doctor, however, who can fix you up so that you can get in,' said the agent. 'He's got a wonderful invention that can tell you just what the trouble is.' The Mount Vernon man accordingly met the doctor with the dynostat. The doctor persuaded him to buy one of the machines, and he gave him small doses of strychnine. Following the course of strychnine the Mount Vernon man was dosed with morphine. This broke him up. Then the dynostat man said he would introduce him to a Doctor Hale, an English specialist who happened to be in this country. 'Perhaps' he said, 'Dr. Hale will undertake to diagnose your case, although he is a very busy man.'

The Mount Vernon man went to see the celebrated specialist. On the first visit he waited in the office a long time, and was

obliged to go away without seeing the alleged physician. They were playing him and he was hanging onto the hook well. It was not until the third visit that he was admitted to the presence of the great man. As he entered he observed lying on the desk in a conspicuous place a long, white cardboard box. It was open. On a bed of cotton within it was a vial filled to within an inch of the top with a greenish yellow fluid. As you see" (the lawyer held up a hermetically sealed bottle, filled with a liquid suggestive of a beautiful engine oil), "it was hermetically sealed when I got it," he continued.

The major part of the diagnosis," he went on, "consisted of a series of questions intended to disclose the sum the patient could pay for a cure. Then the learned Englishman announced that the patient had Bright's disease. There was only one thing, he said, that would cure the disease. That was radium. As he said this he took up the bottle of greenish-yellow liquid from its soft bed and held it up before the light.

'Do you see the shining particles floating in that liquid?' he said. 'They are particles of radium.' The great man fingered the bottle lovingly as he added: 'That bottle contains radium valued at hundreds of thousands of dollars. I could let you have a little of this if you had the money. In order to help you to a cure I will contribute an amount of radium equal to that which you can afford to buy.'

The man did not know what to do. He believed that he was suffering from a disease which could be cured only by the use of the expensive compound. He thought of the few thousands of dollars he had laid up against a rainy day and for the comfort of his son. The argument, What is your money to be compared with your life? finally brought him to terms, and it was agreed that he should have a small bottle, about the size of your little finger, filled with the precious, life-giving fluid, for \$10,000, his entire savings. The money was paid and he began to take the medicine three drops in a wine glass of water three times a day. The victim came to the conclusion too late that he was a dupe, and he had the man who invented the dynostat arrested. I have shown the bottle to chemists, and they say that it contains a mixture of copper.

CHARACTER OF VICTIMS

The people who promise the most as victims are those who are either hypochondriacs or who are suffering from some disease which has wasted away their powers of mental resistance to such an extent that their minds are openly receptive to the arguments of the charlatan and they are ready to build up illusive hopes upon his marvelous claims and extravagant promises. The

hypochondriac is so fruitful a field that in the operations of the quack there is a place for the 'hypo creator,' as those are styled who devote their energies to creating in people a belief that they are sick. The real sufferers who may be depended upon to furnish patients for the quack include the hopeful consumptive and the sufferer from locomotor ataxia. Many of these are ready to grasp at any straw as they draw near the brink of the fall. In fact, the medical mountebank is no better than a straw in his ability to save those who are within sight of the edge—or to heal those who are not, for that matter.

For the benefit of the consumptive, the quack has followed his usual course and drawn upon science for his bait. Some time ago advertisements appeared of an *X*-light which had been designed for examination of the lungs in order to determine whether a person had consumption or not. By means of the invention the physician was supposed to be able to see into the lungs and determine if there was any diseased tissue there. In the advertisement attention was drawn to the fact that the earlier the presence of the disease could be determined the easier it could be cured. No matter how slight the lesion, it could be discovered by the *X*-light.

After using his *X*-light the quack advertiser would bring forth a picture of a pair of diseased lungs, which he said was the picture he had just made of the patient's breathing apparatus. This was a fine 'hypo creator.' The patient could not know that the solemnly given diagnosis of the diseased condition of the lungs was only an invitation to take his vibratory treatment, ultra-violet rays, electricity, etc.

Electricity has been worked hard by the quack. Large sums of money have been made in the sales of batteries, magnetic belts and shoes with zinc and copper insoles. It has been called 'the stream of life,' a 'mysterious force' and other fanciful names by innumerable swindlers. The dynostat was based upon it.

Two or three months ago the papers contained accounts of a man who had made 'magic boots' for those with deformed limbs. He had been arrested on the charge of grand larceny by false pretense, etc. For some of these boots the maker is said to have secured \$5,000 a pair. He declared that they possessed a mysterious power which would cure such diseases as locomotor ataxia, paralysis, rheumatism and neuritis. When asked what the 'mysterious power' was he would talk darkly about their being 'charged' so that when worn they set up a magnetic influence that caused a current of nerve force to course through the body. The shoes could be 'recharged' by him—at a 'charge' of \$25. Their real and only value lay in the fact that, having been made to fit plaster casts of the feet of the prospective wearers, they

fitted their feet exactly and bore the weight comfortably without regard to the position in which the feet received it.

In his establishment he had a room which he called the 'Chamber of Miseries.' It reminded one of a shrine, for its walls were hung with braces of all kinds, which he would say to the visitor had been taken from cured patients. Among the braces was one of iron which he declared had been worn by Bishop Potter, but which he had replaced with a pair of his 'mechano-physiological boots.'

Professor F. B. Crocker, head of the electrical department of Columbia University, testified at the preliminary hearing before Magistrate Poole that the shoes could hold no electricity and were like ordinary shoes. The minimum price of this footgear was \$200 a pair, and, as the evidence showed, there had been not a few pairs sold at prices higher than this.

WOMEN WATCH FRAUDS.

To detect and convict these medical crooks and illegal practitioners the County Medical Society maintains an experienced detective force and a remarkable card index system for keeping tabs on this class of criminals. Detective work involves temptation, and especially so when it is carried on against wealthy swindlers who are able to corrupt the emissaries of justice. Every one in charge of a force of investigators realizes the difficulty of keeping them honest and efficient. We had had more or less trouble with our agents, or detectives, and four had been discharged for suspected collusion with the men they had been sent to watch. We had an ex-sergeant of cavalry as chief detective. He was a very able man, and is now in the Police Department. In some delicate cases he had his wife assist him in procuring evidence, with such success that several of her friends—stenographers, governesses, telephone operators and trained nurses—were pressed into service for occasional cases. Eventually women practically excluded men altogether from our force of detectives, and since then not a case of dishonesty has come up.

The society has ten women agents, and they have shown themselves ideal detectives, endowed as they are by nature with all the arts of dissimulation. Their wits match those of the wildest charlatans on the lookout for legal retribution. What man could extract evidence with a winning smile or tell a long fiction with entire plausibility? It might seem that men have the advantage in disguising themselves with more or less whiskers, but the woman detective, by a change of costume and voice, dropping her hair from pompadour so as to conceal brows and ears, can transform her appearance even more radically. Again, a majori-

ity of medical sharks prey on women, which makes it easier, as well as poetically just, for the feminine sleuth to compass their downfall.

The only fault of women detectives is that of indiscretion," Mr. Andrews declared, "and this has led to a few compulsory resignations. When an agent becomes too familiar with opposing counsel or a prisoner, acts in court in such a skittish way as to discredit the serious work of the society, gives interviews to newspapers without authority or tells her husband about an impending case—which has happened and been discovered—her usefulness is at an end. It may appear a harsh rule not to confide in husbands, but when one considers that great interests are at stake and fakers have thousands of dollars to spend in getting information, its wisdom becomes obvious."

'Every flea has another flea to bite him,' wrote the poet, and the County Medical Society frankly watches one set of detectives with another. This is the time honored system of the Petersburg Third Section and the Washington Secret Service. Two agents are often sent to the same place at different times without the knowledge of each, and their reports are compared. It frequently surprises an agent in court to find a sister investigator giving testimony. But the principal object of double espionage is to keep the emissaries of quacks from getting on the staff and checkmate the efforts of four or five quacks' sleuths who dog the steps of the society officers for the purpose of getting information. The charlatans, realizing the convenience of having news direct from the enemy, have sent stylishly dressed, handsome women to the society's offices as applicants for detective jobs. These women have been traced back to the fakers' headquarters.

MARRIED WOMEN PREFERRED.

The preferred agent is a married woman of good repute, but without previous experience, who can be trained to the work in hand. She is put on probation for a period, and learns the elements of the law of evidence, the difference between hearsay, or loose conjecture, and the hard facts needed to secure conviction. She goes out with an old agent and writes reports to test her memory and seeing talent. After a while she is used as a corroborative witness, and in four to six months' time becomes competent to handle independent investigation. Once employed, the agent never comes to the society office, but is communicated with at her home. This is a measure of precaution. The daily reports are filled out according to this form:

Statement of..... Residing at.....

On theday of, at....o'clock, I visited

....., whom I found located in, at No. Street. A sign on the..... read as follows:..... On entering I was met by (Here state, in order mentioned, what defendant said at introduction, what symptoms you gave, how he examined you, what his diagnosis and treatment, and whether you received anything in writing from suspect).

The suspect's card read as follows, and is hereto attached The suspect's advertisement and literature is hereto attached and initialled by me. The medicine given by the suspect consisted of....., and has been initialled by me. I paid the suspect \$.... in the form of.....

During my interview and treatment there was present with me..... No other person was present except.....
Remarks.....

(Signed, with date).

The agent is supposed to write her report immediately after visiting the quack's office, whether in a convenient hallway, at a drug store counter or a hotel table, so as to insure accuracy of all conversations. No badge or weapon is ever carried by the agent, and in most cases she does not make her identity known until the confrontation in court. There are assuredly unpleasant and a few positively dangerous moments that try the nerves of the investigator and make her wish she was not alone in the power of a scoundrel who might contemplate any crime to escape prison. These moments are especially liable to occur when a trap is set for the charlatan and the authorities break in at a critical point upon a signal. It happened once that a helpless agent had to disclose herself when a signal went wrong and the officers were delayed in entering.

'Mary, put those instruments away,' ordered the malefactor to a servant.

'You'll do nothing of the kind,' said the pseudo patient. 'I am an agent of the Medical Society, and I tell you to leave everything alone under penalty of the law.'

The quack and his servant gave the agent a murderous look, but did not venture to translate their feelings into action.

Detective Sergeant Andrew Ferretti is detailed by Police Commissioner Bingham to head the society's detective force and make all arrests. He and the one other man on the staff also attend to all 'trailing.' Speaking four languages, Detective Ferretti is especially skilled in Italian dialects, the use of which assumes importance in many midwife cases. The first thing ascertained in such a case is which dialect out of a dozen or so is spoken by the suspected person. If Ferretti doesn't know the exact dialect, some member of the staff does and goes out to win the person's confidence and get evidence.

NEW TRAP EFFECTIVE.

The officers of the society pride themselves on the economy, neatness and dispatch of a newly devised scheme of trapping a certain dangerous kind of practitioner. According to the old way they had to hire apartments and to pay for an expensive 'plant,' witnesses and detective being concealed in a closet or under a bed. Now, the hapless grafter is made to supply the 'plant' in his own house. There is no expense for rent. Any marked money is returned immediately after the arrest.

'It's tough to think of the same \$20 bill catchin' half a dozen of us,' remarked one crooked practitioner after his arrest.

One agent, in the new method, arranges to have an illegal operation performed at 11 o'clock in the morning. At 10:45 o'clock Agent No. 2 enters the office and ostensibly waits to see the doctor. A few minutes after 11 Detective Sergeant Ferretti and John S. Cooper, a lawyer, arrive in the street and either wait in a hallway or loiter in a store opposite. There is an elaborate code of signals. If anything went wrong with No. 1, she could pass out of the office and, without saying a word, let the second agent know that she must complete the job. But if all goes well No. 1 gives a signal at the critical moment, perhaps by a natural yet piercing scream or a handkerchief shown at a window; whereupon the pseudo patient No. 2 opens the outside door to admit detective and lawyer. And the malefactor is caught redhanded. Nothing is lacking to the artistic plot of justice that resembles the confederated system of crooks—a stool, a 'pal,' a police officer with power of arrest and a lawyer to manage everything according to legal etiquette.

As a detail of economy it has been discovered that a quack whose regular fee is \$10 will accept \$2 or even 50 cents and a promise. The agent is generally as liberal of her promise to pay as he is of his engagements to cure. But the payment of a fee is not a necessary feature in legal evidence.

About one in every four cases investigated is rejected by the society. Victims and revengeful persons bring in many complaints, and cases are followed up from newspaper advertisements of charlatans. Few victims are willing to tell their experiences on the witness stand which makes it necessary for the detective to collect nearly all the evidence. A case once taken up is never dropped. From three hours to one year is required for an arrest. The three hour record was made one morning by Detective Ferretti and Mr. Cooper, on receipt of a complaint forwarded by Police Commissioner Bingham. Within the time named the quack had been investigated, had confessed and been locked up. A quick job is usually engineered by sending in three or four

women agents in succession. By the time the last one is out of the quack's office enough evidence to convict is in the hands of the lawyer. Sometimes an agent is instructed to act in a suspicious manner, or make the quack angry, so that he may betray himself in some way. Having done her part as irritator, she leaves the place for good, and a smooth tongued agent completes the work.

It takes three or four months to get up a case against a diploma mill, where the proprietor is too wary to sell his diploma for immediate cash. In the case of a Broadway School of Chiropody an agent was enrolled as a scholar, took the regular three months' course, obtained a diploma and thus had evidence against the institution. Osteopathy medicos have been lured to the homes of agents who became suddenly ill. Sometimes a bluff is resorted to instead of an arrest when the evidence does not seem sufficient. For example, a woman physician was put through an informal third degree in her office. She broke down, wept, confessed and promised to leave town.

MANY CLASSES OF CROOKS.

The charlatans operating in New York are classified as consumption sharks, advertising specialists for men only, oculists, nature and water cure doctors, midwives, osteopaths, somatopaths, vitapaths and other "paths" too numerous to mention. The man who is known to have money is the especial prey of these quacks. A short time ago, an illiterate but shrewd Irishman, of this city, who had accumulated a little fortune by his investments in real estate and the construction of small apartment houses, died from locomotor ataxia. For some months before it had been almost impossible for him to speak. To the average quack he looked like a good subject. One day a stranger called at his home and told him about some wonderful underwear which, if worn by one afflicted with locomotor ataxia, would cure him. The price, the stranger said, was \$250 a suit, but in view of what it would accomplish, that was a moderate figure.

The habits of a lifetime clung to the old Irishman, and he declined to pay 'sight unseen.' The stranger asked the privilege of bringing an old man who had been cured by wearing the underwear to prove all that was claimed for it.

The second floor of the Irishman's home was undivided, the entire floor being used as a drawing room. There was not a great deal of furniture in the room, and it was an excellent place for the display which the stranger had arranged in order to convince the well-to-do Irishman. On the day appointed the stranger came with an elderly appearing man. The latter gave an exhibition in the long drawing room that would have done an acrobat

credit. The old Irishman was still suspicious of the truth of the assertions of the seller of the underwear, for there was something about the appearance and the actions of the gray-bearded gymnast that suggested that he was a professional of possibly twenty-five years made up for the part he assumed. He did not buy any of the high priced underwear.

The laws against medical fakers are held to be much too lenient. Practising medicine without a license is merely a statutory misdemeanor, and the penalty is \$250 fine or six months in prison for the first offence, with double the amount of fine and imprisonment, either or both, for the second offence. It is fortunate that a charge of grand larceny can be made against those who ruin a patient's health and then charge several hundred or a thousand dollars for the service. No penalty would seem too great for a charlatan who deliberately creates running sores on the body of a healthy man, then tortures his mind and robs his purse under the delusion that he is suffering from an incurable disease.

MANY FRAUDS LAUGHABLE.

Some of the ways in which mankind is willing to be duped are almost unbelievable, they seem so ridiculous. Disease is not the only source of revenue of the fraud. There are those who are suffocating from an oversupply of sentimentality, and who believe in supernatural powers. For such a 'Dr.' White, of Baltimore, who was tried recently in the United States District Court in that city on the charge of using the mails to defraud and is now serving a three years' sentence, compounded love charms and invented the 'ancient Egyptian breastplate,' said to contain charms and prayers. The latter was said by the 'doctor' to be charged with 'magic solar fluid.' The breastplates were two inches square. They were filled with colored fullers' earth. Printed prayers were sewn into them. This plate would do many things for the wearer, according to a circular which was read in the court. It would right love affairs which were not progressing favorably. It would turn the tide in one's business. It would give health to the sick. In the words of the circular:

"It will draw to you great forces and enable you to gain many of your greatest desires. It will give you good luck and guide you to success. It will lead you to the greatest secrets. It will cause you to learn all secrets. It gives you magical power. It will cause you to gain friends and also enable you to gain money from all parts of the country.

Your purse will be fuller.

Your life will be brighter.

Your home more happy.

Your desires will be granted.

Bad will turn to good.

According to the testimony, White also made mirrors for the use of mediums by which they could see spirits. One woman said she paid 'Dr.' White \$700 for a pair of them. A carpenter demonstrated the profits in the quackery business by testifying that he made the mirrors, and the cost was \$3.50 each.

The spell to create love was styled the 'Adam and Eve' charm. Adam and Eve were represented by roots declared to be obtained from Africa—Adam was one root and Eve another. The roots were to be placed in running water and the words 'Whom God hath joined together let no man put asunder' were to be recited.

MANY PERSONS SOUGHT CURES.

At the trial which resulted in the conviction of the 'doctor' more than 200 persons who had been duped in one way or another were present to testify. They came from widely separated parts of the country. There were cripples who had thought to secure help from this wonderful man; there were clergymen who had sought cures; there were young women, one an attractive Brooklyn girl, who was manager for a tiling business and had had a difference with a 'gentleman friend,' who had sought help in untangling their knotty love affairs; there were members of families whose homes had been broken up by the coming of the 'doctor's' correspondence course in black and white art. The Brooklyn girl was more fortunate than some of her fellows, for the \$5 which she had sent for the 'Adam and Eve' charm was returned, as the 'doctor' said he was out of the roots which comprised it. One woman who had taken the course in the magic arts, with the expectation of discovering a pot of gold in the earth just outside the house and of becoming a spirit medium, became so suspicious of the presence of spirits that she practically became insane, and was so near death that a priest administered the last sacrament. He discovered the book sent to the woman by 'Dr.' White which had caused all the trouble, and after he had burned it the woman began to recover. She left her home and had not returned at the time of the trial. Although separated, the woman, her husband, their son and the priest were all at the trial as witnesses.

It is estimated that between 15,000 and 20,000 people in different parts of the country had become students in his correspondence school for instruction in 'spiritualism, hypnotism and black and white arts.'

There was a great hubbub in the Yorkville Police Court in the latter part of March. A score or more of the East Side women had gathered there to testify against Julius Benjamin. He was charged with practising medicine without a license. It was asserted by one of the witnesses against him that he had a

silver handled broom which he used in brushing away the sins of those who came to him for advice, and seemed to be so laden with guilt that nothing could be done for them until the cobwebs of error had been brushed away.

There are hundreds of people in New York who feel that they have been benefited by the 'prayer strips' which one East Side 'healer' has given them. These 'strips' are pieces of paper on which are written the prayers which the 'healer' offers up for the health of her patients before an altar in her room. What the prayers are, are unknown to those who are depending upon them for health, for they are in characters with which they are unfamiliar.

The man with thousands of dollars and the poor with only 15 cents to pay for a 'prayer strip' alike are vulnerable to the arts of the quack and the fraud. Altering Puck's comment slightly: 'Lord, what fools some mortals be.'"

THE ADMINISTRATION OF DRUGS FOR THE CONCURRENT RETARDATION AND STIMULATION OF SYSTEMIC OXIDATION.—Bernard Oettinger believes that a methemoglobinemia of nontoxic proportions may exist, and hence that this blood condition must not invariably be regarded as deleterious to conservative metabolism. He shows that good comes to a patient from slight methemoglobinemia, effecting an increased oxidation of a selective character. This is an oxidation through methemoglobin of intermediate products of metabolism, which in diseased conditions accumulate in abnormal amounts in the blood, but which, at the same time, is an oxidation without effect on the normal tissues. Therapy makes use of this blood change to aid in conservation of nutrition. As examples of the drugs used for this purpose the writer cites, among others, amyl nitrite for angina pectoris, and pyridin inhalations in asthmatic attacks. In connection with the foregoing hypothesis the writer advances a second to explain rationally the concomitant use of another class of drugs, whose relation to systemic oxidation is opposed to those already mentioned. Quinine, arsenic, phosphorus, iron, and strychnine are used in both acute and chronic diseases. The first three are given individually, under widely different indications. Their concomitant use, the writer believes, is due to the fact that they have in common the property of retarding tissue oxidation. In disease, regressive metabolism is always increased. Against such increased catabolic tissue oxidation the use of a drug which retards oxidation must be valuable. Thus is explained the simultaneous use of drugs to effect concurrent retardation and stimulation of oxidation.—*Medical Record*, July 28, 1906.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 284 FRANKLIN ST., BUFFALO, N. Y.

VOL. LXII.

SEPTEMBER, 1906.

No. 2

Interstate Reciprocity in Medical Licenses.

A REVIVAL of interest in reference to state exchange of licensure courtesies seems to be pervading the medical profession of late. The subject is being discussed in medical journals and medical societies and, as it seems to us, altogether too much importance has been accorded this interlocutory question relating to state control of medical education.

It would be desirable on some accounts if this republic were made up of a single commonwealth, instead of being composed of forty-six separate states and a few territories. It would simplify many questions that now arise to perplex lawyers, courts and individuals. The divorce laws, for example, would be unified, the criminal code would apply in a uniform manner to every citizen of the republic, and many other matters of law and administration would be reduced to a simple process.

Reciprocity is of course desirable but it is not essential to the successful working of our medical laws toward the final goal of uniformity in standards. We have pointed out on more than one occasion that the surest route to reciprocity is through uniform methods of admission to our medical colleges, equal standards of teaching, and length of terms of study. It would seem out of place for medical colleges to demand reciprocity while there is still so much that is unequal in their own methods.

We are quite prepared to understand how some of the smaller colleges feel disturbed at state supervision or control. They have been accustomed so long to regulate their own affairs that restraint chafes when applied or adjusted by a power that cannot be resisted. So many items of prime importance require attention that secondary questions, like reciprocity, may with propriety be allowed to stand in abeyance for the present.

We have been led to return to this subject because of a paper by Dr. James A. Egan, secretary of the Illinois state board of health, read before the Illinois State Medical Society in May,

1906, and recently distributed as a reprint, the JOURNAL having been complimented with a copy. Dr. Egan's knowledge of the subject is comprehensive and intimate and he discusses it with great perspicacity. He takes up the question from legal as well as from medical viewpoints, and we advise all interested to obtain a copy of this interesting reprint.

In a supplement to his paper he pays his compliments to Dr. William J. Mayo, president of the American Medical Association, quoting from his presidential address at Boston, as follows:

Another question of great importance is that of reciprocity in medical license. The conditions are now well-nigh intolerable and restrain the individual freedom guaranteed by the constitution. The boundaries between the states are imaginary lines; yet a physician on one side of the border cannot relieve human suffering on the opposite side without becoming amenable to the law or subjecting himself to vexatious examinations which he has already successfully passed in his own state. This must be met and speedily by agreement between examining boards as to the minimum of requirements.

Dr. Egan then comments in detail on this statement of President Mayo in the following language:

In connection with Dr. Mayo's remarks the editor of the Journal of the Association, in the issue of June 9th, says: "there are few men who will not agree with him in what he says in regard to state licensure and reciprocity."

It may be that there are many who will agree with Dr. Mayo that the conditions now existing "are well-nigh intolerable," but with all respect to President Mayo and the editor of the Journal of the Association, there are but few who have given the question of national and state control of the regulation of the practice of medicine proper consideration who can agree that the conditions set forth by Dr. Mayo actually exist.

In the logical consideration of a problem, we must deal with facts, not with fancies. In an attempt to solve a problem we must, if we are to attain success, deal with the finite, not the infinite; the possible, not the impossible; with practice, not with theory.

The right to practise medicine is not a part of the individual freedom guaranteed by the Constitution. As has been aptly stated "the individual states were in no way divested of their sovereignty by the adoption of the United States Constitution, except so far as that instrument shows an express surrender of their sovereignty." The regulation of the practice of medicine comes within the police power of a state, a power which the states have retained unimpaired since 1789.

The boundaries between the states are imaginary lines, in but imagination. In reality the state's boundary lines are as stable

and definite as the national boundary lines. State lines existed prior to the national lines. In the original establishment of the United States, the state lines were the definite and well defined lines, while the federal lines have remained expansive to be adapted to the extension of the states constituting the Union. The line between Illinois and Indiana, where no geographical line of demarcation is to be found, is quite as definite and exact as the line between the United States and Canada, or that between Austria-Hungary and the Russian Empire.

The necessity for a physician on one side of the border of a state relieving human suffering on the opposite side, is not obvious except in cases of dire distress, where an emergency exists. Under these circumstances a border line physician can practise without let or hindrance, and no state board will interfere with him. But there is seldom an emergency, seldom a case of dire distress, which cannot be given attention by the physicians of the state in which it occurs. Nearly every state has its quota of capable and qualified physicians.

But it has been said that a citizen of one state taken ill in another state cannot be attended by his family physician unless the latter be licensed to practise in the state in which the patient lives. I deem it sufficient to call for statistics of prosecutions instituted in the various states on account of practice of this character. I refer now to practice in an individual case, by the bona fide family physician. I do not refer to the practice of the itinerant. I do not refer to the practice of the tourist who is prone to consider himself the family physician of all persons,—and their friends, relatives and acquaintances,—coming from his native state. I do not refer to the practice of the physician who, when summoned to another state to treat his patient, treats all who apply to him. But even now the laws of nearly forty states permit the practice of physicians from other states in consultation.

It would be exceedingly difficult for any state, which must retain the controlling power in medical licensure until the constitution of the United States is radically changed, to draw a line which would limit the invasion of physicians from other states if the natural state boundary lines were ignored. The state line must be the logical and only practical limitation for the practice of the physicians of each individual state.

As to the limitations placed upon practitioners of the various states, the statements of Dr. Mayo are misleading. The restrictions upon those who have already successfully passed examinations in their own states, are gradually disappearing under the present systems of reciprocity. Few physicians who have successfully passed examinations in their own states are required to pass examinations in other states. Thirty-seven states are now empowered to reciprocate; of these twenty-six do reciprocate. But it must be borne in mind that the percentage of physicians

who have passed examinations of any kind in their own states is small.

It may be added further, in commenting upon the brief extracts quoted from Dr. Mayo's presidential address, that, among the majority of boards which have found reciprocal relations consistent with the laws under which they operate, a definite understanding has been reached in regard to the minimum requirements of medical education.

Dr. Mayo is a learned man and careful of his statements, but in this instance he seems to have spoken hastily, basing his remarks on the ill-considered journalistic material which is afloat, rather than upon a careful study of the situation on his own part. Dr. Egan, however, has made complete answer to the distinguished president and it is hardly worth while for us to pursue the matter in further detail.

The Gratwick Research Laboratory.

SOME years ago, through the liberality of Mrs. W. H. Gratwick, of this city, a fine building was constructed on High street opposite Buffalo General Hospital, for the purpose of housing the cancer laboratory which has been conducted the past few years by Dr. Roswell Park as a part of the medical department of the University of Buffalo, and lately has been placed under the supervision of the state department of health. Dr. Gaylord and Dr. Clowes have conducted experiments in this laboratory relating to the cause of cancer that have attracted attention all over the world.

Before the adjournment of the last legislature, at the instance of Senator Henry W. Hill, an appropriation of \$18,000 was made by the state for the purpose of continuing the work during the current fiscal year. On June 2, 1906, Mr. Charles A. Ballance, of London, spent the day in Buffalo and visited the Gratwick laboratory in company with Dr. A. Vander Veer, of Albany. Mr. Ballance and his brother, Mr. H. A. Ballance of Norwich, Eng., were Dr. Vander Veer's guests during the meeting of the American Surgical Association at Cleveland and spent a day in Buffalo en route, the Messrs. Ballance being prominent surgeons in their respective homes.

Soon after his return to England, Mr. Ballance, senior, who has had a large experience in cancer research, hence is competent to judge of the value of the work being conducted in Buffalo, addressed a letter to Senator Hill relating thereto, which we deem of sufficient interest and importance to publish. The letter is as follows:

July 11, 1906.

106 Harley St. Cavendish Square, W. London.

"*My Dear Sir*—I have recently had the privilege of visiting the cancer laboratory of the University of Buffalo and I should like to tell you what I think of the work going on there. In no part of the world is better work being done to unfold the intricate problems surrounding the intimate nature of cancer. I was myself engaged for many years in cancer research and so feel competent to form a judgment on the work being carried out at Buffalo. In a disease like diphtheria, which kills quickly, say in three or four days, it was possible, with the advance of bacteriology and chemical pathology, soon to discover its real cause and devise a serum remedy for its treatment. In cancer we have a disease which runs a much longer course—one, two or three years—in the human body and, therefore, we cannot expect either to find the real cause or happen upon its successful treatment without prolonged research, a research which may result in say 25 years in great triumph over human misery and pain. It is to Buffalo that I shall look, year after year, for those discoveries, which will relieve mankind from the dread spectre of this terrible disease. There is no work in all the world more deserving of ample support than the cancer research laboratory.

"I remain, my dear sir,

Yours very truly,

CHARLES A. BALLANCE."

If there were a doubt in the minds of any persons as to the propriety of annual appropriations by the state for scientific medical work on the lines conducted in the Gratwick laboratory, this letter of Mr. Ballance should be sufficient answer to such objections. No country in the civilised world spends as little money from the public treasury for scientific medical investigation as the United States. Mr. Ballance has rendered great service in placing his approval upon the investigations going on in Buffalo relating to the cause of cancer.

ATTENTION is invited to advertising page x, whereon the books, instruments and appliances, of the late Dr. Showerman, Batavia, are offered for sale. Any physician in need of such articles will find it advantageous to consult Dr. Harry R. Trick, 1195 Main Street, Buffalo, of whom all information may be obtained.

DR. SAINT CLAIR MCKELWAY, editor of the Brooklyn Eagle, is among the Americans of distinction now in England. Dr. McKelway is vice-chancellor of the University of the State of New York, and will represent that institution at the 400th Anniversary of Aberdeen University to be held about the middle of September.

DR. C. W. PILLSBURY, of Chicago, is spending a few weeks in Buffalo, calling upon physicians in the interest of the medical preparations of Armour and Company.

DR. H. P. SHARP, of Arcade, N. Y., has been nominated for coroner of Wyoming County by the republican convention recently held in that county.

DR. EUGENE A. SMITH, of Buffalo, who has been spending the summer in Europe, will return to his home and take up his professional work on or about September 1, 1906. During his absence Dr. Smith has visited the clinics of Mayo Robson, Moynihan, Lane, Cheyne, Hartman, Kocher and others. An interesting letter from him, in which he discusses the appendicitis problem, will be found elsewhere in this issue.

DR. F. PARK LEWIS and family, of Buffalo, who have been spending the summer in touring through Europe, are expected to return about September 7, 1906.

DR. H. S. WENDE, of North Tonawanda, has been appointed veterinary surgeon to the fire department of that city for the ensuing year.

DR. HERBERT U. WILLIAMS, professor of pathology at the University of Buffalo, and who has been in Europe for the past few weeks, sailed from Hamburg, August 18, 1906, on the S. S. "Patricia." He expects to reach Buffalo about September 1.

DR. HENRY SCHWARZ, of Saint Louis, accompanied by his family, spent a few days in Buffalo and Niagara Falls, early in August. Dr. Hayd entertained them an afternoon at the baseball games.

DR. AND MRS. WALTER B. DORSETT, of Saint Louis, who visited Buffalo during the latter part of August, were entertained at dinner by Dr. H. E. Hayd of 493 Delaware Avenue, on Monday evening, August 20, 1906.

DR. EDWARD TORREY, formerly of Allegany, N. Y., has removed to Olean where he has established his office at 136 N. First Street. Hours: 1 to 3, and 7 to 8, P. M. Telephone connections.

DR. WILLIAM S. FOSTER, of Pittsburg, was elected a vice-president of the American Medical Association, at its Annual Meeting held at Boston in June, 1906.

OBITUARY.

DR. BERNARDINO CALABRESE, of Buffalo, died at his office, No. 47 Scott street, August 16, 1906, after a brief illness. He was born in Samfele, Province of Potenzo, Italy, in 1838. He was graduated from the University of Naples in 1861, and was one time mayor of his native town.

Dr. Calabrese came to Buffalo about 15 years ago and enjoyed a large private practice, besides being official physician to the Italian consulate. He was an honorary member of several Italian societies in this city and also of the Scientific Society in Palermo, Sicily. He is survived by one son, Thomas Calabrese, of Buffalo.

DR. JAMES B. McCAW, of Richmond, Va., died at his home in that city August 14, 1906, aged 84 years. He was a surgeon in the Confederate army and during the civil war had charge of Chimborazo Hospital, in Richmond, where 76,000 Confederate soldiers were treated. Dr. McCaw was the father of Surgeon Walter D. McCaw, United States Army, who was stationed at Buffalo for some years and who is now engaged in compiling the Index Catalogue of the library of the Surgeon General's office at Washington.

DR. PIERRE DESNOYERS PELTIER, of Collinsville, Conn., died at his home July 21, 1906, of angina pectoris, aged 70 years. Dr. Peltier graduated in medicine from the University of Buffalo, with the class of 1860, was commissioned Assistant Surgeon of the One Hundred and Twenty-Sixth Regiment New York Infantry August 11, 1862, and resigned November 5, 1863. He was a man of accomplishments and took high rank in his profession.

SOCIETY MEETINGS.

THE ASSOCIATION OF MILITARY SURGEONS OF THE UNITED STATES will hold its Fifteenth Annual Meeting in Buffalo, September 11, 12, 13, 14, 1906, under the following administration: president Lieutenant Colonel Albert Henry Briggs, surgeon 65th Regiment National Guard of New York; first vice-president, Brigadier General Robert M. O'Reilly, Surgeon General United States Army; second vice-president, Rear Admiral Presley M. Rixey, Surgeon General United States Navy; third vice-president, George Tully Vaughan, recently Assistant Surgeon General of the Public Health and Marine Hospital Service; secretary and editor, Major James Evelyn Pilcher, Captain (Retired) United States Army, Carlisle Pa.; treasurer, Major Herbert Alonzo Arnold, Surgeon in the National Guard of Pennsylvania, Ardmore, Pa.

The full staff of committees was published in the Journal for April, 1906.

DR. G. H. WESTINGHOUSE entertained the Medical Union of Buffalo at dinner at his summer home on Grand Island on Wednesday evening, July 25, 1906.

Supper was served on the lawn under widespreading trees. Among those present were Drs. S. S. Green, George L. Brown, A. H. Briggs, Vertner Kenerson, C. E. Congdon, W. Scott Renner, A. W. Bayliss, W. C. Krauss, Walter D. Greene, Ernest Wende, Edward J. Meyer, and Harry Mead. Dr. Winship, of Macon, Ga.; Dr. R. H. Satterlee and Dr. A. C. Howe were special guests.

THE EIGHTH DISTRICT BRANCH OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK, held its first meeting August 17 and 18, 1906, at the University Club, Buffalo, under the presidency of Dr. DeLancy Rochester, who was reelected for the ensuing year. Among the papers presented was one by Dr. Marshal Clinton, of Buffalo, entitled, The use of local anesthetics in operations on the chest and abdomen, which is to be published in a future issue of the Journal.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION will hold its thirty-second annual meeting at Hot Springs, Ark., November 6-8, 1906, under the presidency of Dr. J. H. Carstens, of Detroit. Dr. Henry E. Tuley, of Louisville, the secretary, in his circular of announcement extends a cordial invitation to every physician in the Mississippi valley to attend the meeting. The headquarters of the association will be established at the Arlington Hotel.

THE BRITISH MEDICAL ASSOCIATION is holding its seventy-fourth annual meeting at Toronto, while these pages are going through the press, as announced in the August issue. A number of Buffalo physicians are in attendance.

THE INTERNATIONAL HOMEOPATHIC CONGRESS and the American Institute of Homeopathy will hold its sixty-second annual session at Atlantic City, N. J. September 10-16, 1906.

COLLEGE AND HOSPITAL NOTES.

THE Medical Department of the University of Buffalo will open its sixty-first annual session September 24, 1906, and continue thirty-four weeks. The advanced matriculation and registration list indicates a large attendance for the academic year. Dr. James E. King, adjunct professor of obstetrics, will deliver the opening lecture of the course in Alumni Hall, Monday evening, September 24, at eight o'clock.

GREAT MILITARY HOSPITAL.—The War Department is preparing to build near Washington, on Brightwood Road, within the district limits, a large army general hospital, which will be the best equipped institution of its kind in the world. For months the army surgeons have been engaged in looking up literature on the subject and inspecting hospitals in all parts of the country. They have also obtained much information from abroad. The best ideas which prevail anywhere will be used in the new hospital, which will cost a little less than \$500,000. To this institution army officers and enlisted men from all parts of the country and the Philippines will be sent when they are in need of special treatment. There is a general hospital now at Washington Barracks, but it is not up to date and is not large enough to meet all the demands on it.

BOOKS AND AUTHORS.

Urinary Analysis and Diagnosis by Microscopical and Chemical Examination. By Louis Hertzmann, M.D., of New York. Second edition, revised and enlarged, with 131 illustrations. Octavo pp. 319. New York: William Wood & Company. 1906. (Price: \$2.00, Cloth).

With budding urologists and full-blown analysts rather overfilling the field of urologic literature, it is rather more than a mere pleasure to have so able a work as Hertzmann's brought forth in a second edition. This book is nothing in the nature of a miracle worker. It has none of the egotistic ear marks of superior being and it doesn't pretend to make over either a student or a practitioner of medicine into a glittering expert, after a casual reading. It is, on the contrary, a quiet, sensible, well-balanced exposition of a field which has been receiving scant attention up to the present time—namely, microscopic examination and microscopic diagnosis. Complicated tests have no place in the book; but the everyday working tests in the analysis of urine, tests which tell, are explained in detail, and this in itself makes it a really valuable working volume as well as a very helpful one.

It is in the microscopic department of examination and diagnosis that the real worth of the book shows forth. Great stress is laid on these departments, which is proper, because, as every man who works seriously and systematically in the genitourinary field knows, there are many cases in which clinical symptoms, though pointing to the genitourinary tract, are vague. In such cases even a careful and painstaking analysis of urine fails to give a positive finding, yet often the microscope clears away the mists of doubt and points the way to correct diagnosis and rational treatment. A feature which adds to the value of the book is the illustrations, the majority of which were drawn by the author from his own clinic, hence are correct. Their usefulness is in-

creased by their size, nearly all being full page plates in which every detail of microscopic finding is brought out clearly.

Divided into three parts the book covers the entire field of its usefulness in an admirable manner. The first part deals with the chemic analysis of urine; the second with microscopic examination; and the third with microscopic diagnosis. Added to these are pages devoted to diseases of the male and female sexual organs, the determination of the functional efficiency of the kidney, to histology, and to secretion, all of which are unusually lucid. The general remarks on the methods of study and examination, and the advice of the author in matters which might naturally arise in so important a subject, are excellent and clear up the doubts which often becloud the view of a new and ill-understood subject. Too much credit cannot be accorded Hertzmann for the excellence of the drawings he has furnished and the publishers are to be congratulated on having accepted the pen and ink sketches of microscopic findings, reproducing them in full page plates. It indicates that they prefer scientific certainty to prettily printed pages of indistinct half pages. A careful study of the book will make genitourinary diagnosis easier and lead to more sensible treatment,—for all of which the patient ought to feel profoundly thankful.

N. W. W.

Nursing; its Principles and Practice, for Hospital and Private Use.

By Isabel Hampton Robb, Graduate of the New York Training School for Nurses, Bellevue Hospital; late Superintendent of Nurses and Principal of the Training School for Nurses, Johns Hopkins Hospital, Baltimore. Third edition, revised and enlarged. 12mo. 565 pages. Cleveland: E. C. Koeckert. 1906.

The author of this book, formerly Miss Isabel Hampton, is now the wife of the distinguished Cleveland surgeon, Hunter Robb, and is a woman as prominent in social, philanthropic and educational circles as she formerly was in her profession.

The book has been revised to meet the requirements of the three years' course of study which is being adopted of necessity by training-schools in New York and voluntarily in many other states.

In the opening chapter is presented a suggestive outline for a three years' course of instruction, which, to the mind of the reviewer is superior to the one recently presented by the State Board of Nurse Examiners. Following this, the second and subsequent chapters take up those subjects which belong to the elementary instruction of the pupil nurse, as the hygiene of the ward and sick-room, ventilation, light, disposal of excreta, and the like.

The subject of sterilisation and disinfection follows next, some instruction in bacteriology being advised as preparatory to a proper understanding of the subject. The pupil nurse next takes up general nursing, beds and bed making, the care of a patient in bed, convalescence, baths of various kinds, in fact all the procedures a nurse should be acquainted with before being set to work on

a particular case. Then follow chapters on nursing in general, medical diseases, surgical and gynecological nursing, nursing in infectious diseases, nursing of children, obstetrical nursing, and nursing in certain special diseases, as affections of the eye, ear, etc. The whole field of nursing is covered thoroughly and well.

The work is not intended to instruct the nurse fully in the art of nursing. No one volume can suffice for that with the present standard of education. But as a guide for the superintendent and nurse instructors, and as a textbook for pupil nurses it is eminently satisfactory, up-to-date and thorough.

An excellent reference list for supplementary reading and study is given in the opening chapter. M. J. F.

On the Relations of Diseases of the Skin to Internal Disorders.

With observations on Diet, Hygiene and General Therapeutics. By **L. Duncan Bulkley**, A.M., M.D., Physician to the New York Skin and Cancer Hospital, Consulting Physician to the New York Hospital, Consulting Dermatologist to the Randall's Island Hospitals, to the Manhattan Eye and Ear Hospital and to the Hospital for Ruptured and Crippled, etc. Demioctavo, pp. xv-175. New York and London: Rebman Company, 1123 Broadway. (Price: \$1.50).

These lectures were delivered to physicians at the New York Skin and Cancer Hospital during the month of March, 1905, and have been published in book form in compliance with numerous requests. The following synopsis indicates the scope and character of the lectures:

Lecture I.—1. Importance of the Skin as an Organ. 2. Predisposing and Exciting Causes of Skin Lesions. 3. Recent Recognition of Faulty Metabolism, Autointoxication and Neurotic Disturbances causing Skin Lesions. 4. Nature of Underlying Cause. 5. Broadness of True Dermatology.

Lecture II.—1. Digestive Disorders related to Skin Diseases. 2. Excretory Disorders related to Skin Diseases. 3. Cutaneous Disorders relating to Skin Diseases. 4. Respiratory Disturbances related to Skin Diseases.

Lecture III.—1. Nervous Disorders related to Skin Diseases. 2. Circulatory Disorders related to Skin Diseases. 3. Sexual Disorders related to Skin Diseases. 4. Anemia as related to Skin Diseases. 5. Malaria as related to Skin Diseases. 6. Syphilis as related to Skin Diseases.

Lecture IV.—1. Diet as related to Skin Diseases. 2. Hygiene as related to Skin Diseases. 3. General Therapeutics in Skin Diseases. 4. Frequent Importance of Skin Lesions, as indicating Systemic Diseases. 5. Importance of Correct Local Treatment.

Rarely has so much information of value been imparted in so small a book, and never before have the relations of skin disorders to other maladies been explained with such lucidity. It is a monograph that no practising physician can afford to do without.

A Treatise on the Nervous Diseases of Children, for Physicians and Students. By B. Sachs, M.D., Alienist and Neurologist to Bellevue Hospital; Neurologist to the Mt. Sinai Hospital, consulting physician to Manhattan State Hospital, east and west. Second edition, revised. Octavo. pp. 12-571. New York: William Wood & Co. (Price: \$4.25).

This work being written by a trained neurologist of wide experience, it is interesting to note the position Sachs takes in regard to certain mooted questions. In his chapter on epilepsy, he says of eyestrain, of urethral stricture, of narrow prepuces and of laryngeal irritation: "I doubt if any one of these conditions has ever been the sole cause of epilepsy, though I am willing to concede that they may be sufficient to produce occasional attacks in persons with this special hereditary taint." In view of the strong anti-bromide position taken by Dr. Spratling, of Sonyea, it is important to observe that Sachs says, "up to this time, we have found no drugs that can in any sense be considered proper substitutes for the bromides." He is outspoken in utterly condemning the cutting of the eye muscles in epilepsy. In the treatment of chorea, he places rest in bed in the foreground, milk diet coming next in importance. In using arsenic, he is far more cautious than was Seguin. Sachs would rather abandon the use of arsenic than push it to the extreme that Seguin did. We do not agree with the author in his discussion of headache and eye strain. He is "firmly convinced that eye strain is the sole cause of headache in relatively few instances, and that these are located over the eyebrows." In our experience the location of the headache due to eye strain is quite as often occipital in location.

The description of the diseases of the spinal cord is most admirable, while the work as a whole is an excellent presentation of the subject as it is taught today. The author's personality is strongly felt throughout the book. We feel that this work fills a distinct gap in medical literature.

J. W. P.

Essentials of Genitourinary and Venereal Diseases. By Starling S. Wilcox, M.D., Professor of Genitourinary Diseases and Syphilology, Starling Medical College, Columbus, Ohio. 12mo. of 313 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$1.00 net).

It is a difficult matter to crowd into a compend all the material necessary to an understanding of so complicated a subject as genitourinary work, to say nothing of venereal diseases; yet Wilcox has made a brave effort to combine the two subjects in one small volume of the Saunders series of compends and has succeeded in presenting a book which is, at least, helpful to a student in a broad sense, for it gives him an idea of the depth of the subject and its manifold difficulties. One cannot very well approve of the subcutaneous ligation in varicocele, nor of castration for prostatic hypertrophy, any more than one can accept the suggestion to irrigate the urethra by means of catheter.

The treatment of gonorrhea by irrigation is given its proper place in the forefront of other methods of local procedures, and did some of the insurgents of the profession use the care in irrigating by the Valentine method which Wilcox so strongly advises, they would get better results; also be less likely to beat the tom-tom of ridicule, and hold up their own mistakes as routine results of a most excellent treatment. Wilcox's command of the subject is comprehensive and his manner of presenting the details of symptomatology and treatment is admirable. The book cannot help being of great service to the student; and it might be studied to great advantage by many a general practitioner whose tendency is to make light of the venereal diseases, and whose lack of detailed knowledge in the genitourinary field leads him to practise in this branch of medicine with a bottle of acid and another of alkaline cystitis tablets.

N. W. W.

Ellis's Demonstrations of Anatomy. Being a guide to the knowledge of the human body by dissection. Twelfth edition. Revised and edited by **Christopher Addison, M.D., BS.** (Lond.), F. R. C. S. Lecturer in Anatomy, Charing Cross Hospital, Medical School; Examiner in Anatomy, Royal College of Surgeons, England, etc. Illustrated by 306 engravings on wood, of which a large number are in colors. Octavo volume, 861 pages. New York: William Wood & Company. 1906. (Price, muslin binding, \$3.50 net).

Without doubt the best way to obtain an accurate knowledge of human anatomy is through dissection of the various structures of the body. To do this work properly the anatomical student must have a good instructor and an excellent book as a guide. Ellis's demonstrations for many years have been considered among the best, having stood the test of experience. Addison has revised the present edition to meet the advances in the knowledge of anatomy and the changes in the methods of teaching. The material has been rearranged to follow the course taken by students; in appropriate places old matter has been eliminated, principally in those relating to the viscera; and sixty-two illustrations, twenty-seven of which are in colors, have been added. The marginal references are a great convenience to the student of anatomy, and the book is in every respect worthy of continued confidence and favor.

A Treatise on the Diseases of Infancy and Childhood. For Students and Physicians. By **Henry Koplik, M.D.,** Pediatricist to Mt. Sinai Hospital, ex-President American Pediatric Society, etc., New York. New (2d) edition. Revised and enlarged. Octavo, 868 pages, 184 engravings and 33 plates. Lea Brothers & Co., Publishers, Philadelphia and New York, 1906. (Cloth, \$5.00; Leather, \$6.00 net).

Koplik is not a new name nor is he a new author to become acquainted with. His first edition was received with encomiums and his fame as an accomplished pediatricist is world-wide. His treatise takes rank with the best in any land or tongue and his ability as a teacher is acknowledged everywhere.

In this edition the advances of the past few years have been met, and the author's vast personal experiences have been incorporated, thus making the work a practical clinical treatise. It becomes, therefore, of extreme value to the general practitioner, while the specialist of necessity will appreciate and possess it. The section on infant feeding, in which every young mother is so deeply interested, is well worth the price of the book; it is scientifically sound and intensely practical. A strong feature of the treatise is the importance given to physiology and pathology of the newborn; the specific infectious diseases, too, have been elaborately dealt with; in short, the author has presented a detailed yet succinct reflection of the present status of pediatric knowledge, which is not surpassed by any other treatise on the subject. The illustrations are superb, many of them being original. The plate delineating Koplik's spots, a pathognomonic sign of measles, is deserving of special commendation. The volume is provided with an excellent index, which is an essential of every medical treatise.

The International Medical Annual. A yearbook of Treatment and Practitioner's Index. Twenty-fourth year. Substantially bound in cloth and fully illustrated by plates in color and black and white. New York: E. B. Treat and Company. 1906. Octavo, 700 pages. (Price, \$3.00 net, post or express paid).

This book is always welcomed by those most familiar with its scope and purpose. It is a résumé of the medical literature of the past year, prepared by thirty-one department editors, and contains added articles by noted specialists. The staff of editors is made up of men with established reputations in their respective fields,—all specialists of the highest type.

This is the twenty-fourth annual issue of this work and to its credit, its general appearance, size of page, and form remain unchanged. This uniformity in its external fashion gives the volumes a fine showing in the library. Its dictionary make-up, supplemented by a full index, makes it a most complete and satisfactory year book, and with it the busy practitioner is enabled to keep himself in touch with the most recent advances in knowledge and practice respecting any subject in medicine or surgery.

The present number exceeds that of any of its predecessors, as might be expected, and it is not second to any work of its kind in the world.

The Ophthalmoscope and How to Use It. By James Thorington, A.M., M.D., Professor of Diseases of the Eye in the Philadelphia Polyclinic; Ophthalmologist to the Elwyn, Vineland, and New Jersey State Training Schools for Feeble-minded Children, etc. 12 colored plates and ther illustrations. 8 vo. pp. 398. Philadelphia: P. Blakiston's Son & Company. 1906. (Cloth, \$2.50 net).

Thorington has become well known to the medical profession as an author of scientific attainments, through his previous works, "Refraction and how to Refract," and "Retinoscopy." In the

present work he discusses the use of the most important diagnostic instrument relating to the eye that the last half of the nineteenth century produced.

The author gives the most perfect directions for the employment of the ophthalmoscope in the most concise manner, so that even the neophyte cannot fail to comprehend the correct use of the instrument. Moreover, he tells what we should see in the eye, both in health and in disease. Not only this, but he tells how to refract, discusses optics, instructs in retinoscopy, and informs the student upon many cognate subjects.

Thorington, however, has limited his descriptions in the main to those diseases which interest in particular the general practitioner in his daily work. It is not intended to be an exhaustive treatise but, instead, a description of the ophthalmoscope and how to use it,—a purpose in which the author has succeeded in a most admirable manner. The drawings, half-tones, and colored plates give excellent illustration of the text and make it clearly as well as easily understood.

A Textbook on the Practice of Gynecology. For Practitioners and Students. By **W. Easterly Ashton, M.D., LL. D.**, Fellow of the American Gynecologic Society; Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. Second Edition, revised. Octavo of 1079 pages, with 1046 original line drawings. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$6.50 net; Half-Morocco, \$7.50 net).

It is a rare occurrence for the second edition of a medical work to be required within six months from the appearance of the first, but this distinction belongs to Ashton's treatise. It is not only unique in this respect but further, because it describes in adequate detail what is to be done and tells precisely how to do it. Still further, the engravings are line drawings from living models, dissections on the cadaver, actual apparatus, and the operative technics of other authors,—ten-hundred and forty-six cuts in all.

The demand for this edition, coming so soon after the original issue of the book, has left very little to be done in the way of revision. Some errors have been corrected and a few of the illustrations have been altered,—otherwise the book remains the same. What we said, therefore, in commending the first edition remains good for this one—namely that it is a practical treatise by an accomplished gynecologist.

The Operating Room and the Patient. By **Russell S. Fowler, M.D.**, Surgeon to the German Hospital, Brooklyn, N. Y. Octavo of 172 pages fully illustrated. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$2.00 net).

A book with this title coming at the present time is to be welcomed as an addition of value to the literature dealing with operative preparation. The work is really an expression of Fowler's own ideas regarding operative technic, and is essentially useful also for the purpose for which it was written—namely, that

of placing before assistants, internes and nurses, proper and safe methods to be followed in operative technic, preoperative preparation and sterilisation. It is full of valuable instruction to those who have not had the advantages of hospital service.

The book is unique in that it is the first to be published wholly confined to operative technic and preoperative preparation and sterilisation. Not only that, but it outlines preparation of material of all kinds, details necessary instruments for various operations, and describes the preparation of the patient before and his care after operation. There is considerable space devoted to anesthesia which is valuable and instructive, especially that portion which deals with post anesthetic nausea. An interesting feature of the work is the descriptions and illustrations of the different positions of the patient in various operations.

Fowler's style is direct and convincing and his book is happily free from that egotistic straining for effect which mars so many otherwise excellent publications. N. W. W.

The Physical Examination of Infants and Young Children. By **Theron Wendell Kilmer, M.D.**, Adjunct Attending Pediatricist to the Sydenham Hospital; Instructor in Pediatrics in the New York Polyclinic Medical School and Hospital; Attending Physician to the Summer Home of St. Giles, Garden City, New York. Illustrated with 59 Half-tone Engravings. 12mo., 86 Pages. F. A. Davis Company, Publishers, Philadelphia, Pa. (Price: \$75 net).

This author has done the medical profession much service in presenting a subject not heretofore dealt with in monographic form. Whatever has been written regarding it, is to be found in textbooks or general treatises on diseases of children, hence lacks the emphasis that attaches to the treatment of the topic in a separate book, as in the present instance. Kilmer displays an intimate knowledge of children and how to handle them; he knows how to interpret not only their symptoms but their mannerisms, and he has told the story most attractively as well as in thorough scientific fashion. The illustrations, practically all original, are superb and bring out the salient features of the text with insistence. It is, by and large, a book that will do a vast amount of good to all who treat diseases of children

Saunders's Question Compends. Essentials of Materia Medica, Therapeutics, and Prescription Writing. By **Henry Morris, M.D.**, College of Physicians, Philadelphia. Seventh edition, thoroughly revised. By **W. A. Bastedo, Ph.G., M.D.**, Instructor in Materia Medica and Pharmacology at the Columbia University (College of Physicians and Surgeons). New York. 12mo, 300 pages. Philadelphia and London: W. B. Saunders & Company, 1905. (Cloth, \$1.00 net).

A good way to study the topics of which this excellent little volume treats is to use it as an index and pursue the investigation from that basis. The student always has needed reminders such as this and will continue to do so probably as long as time and memory run.

This edition is made to conform to the eighth revision of the pharmacopeia. Articles have been added on diphtheria antitoxin, thyroid extract, and arganotherapy, while a few obsolete drugs have been dropped. This makes the book as complete as such a compend can be, and it is well worthy of the continued favor of those for whom it was particularly designed.

A Compend of Medical Chemistry, Inorganic and Organic, including Urinary Analysis. By **Henry Leffman**, A.M., M.D., Professor of Chemistry in the Woman's Medical College. Fifth edition, revised. Philadelphia: P. Blakiston's Son & Co. 1905. (Price, \$1.00).

This author is a teacher of experience and knows what students most need to meet the requirements of the classroom and laboratory. He has prepared a compend of medical chemistry that has merited a fifth edition, hence has won a place for itself among those for whom it is especially prepared. We recognise no good reason why books of this kind,—quiz compends,—should not be commended, when they are based on scientific facts. Teachers of acknowledged standing write them and students want them. They have their place and no one presumes to give them standing outside their legitimate sphere. This is a good book and deserves to be so rated.

Transactions of the American Laryngological Association. Twenty-seventh Annual meeting, held at Atlantic City, N. J., June 1, 2, and 3, 1905. Dr. James E. Newcomb, secretary. Published by the Association. New York: Rooney and Otten Printing Co., 1905.

This association, one of the older of the special societies, always presents an interesting volume of transactions. An exhaustive article in this book on deflections of the nasal septum is presented by Dr. Otto T. Freer, which is a critical review of the subject, and is profusely illustrated. The other papers are of fine quality and the discussions are highly instructive. A message of congratulation to the venerable Manuel Garcia and his reply afford interesting reading. This staunch association is in a thriving condition.

BOOKS RECEIVED.

Medical Jurisprudence. Forensic Medicine and Toxicology. By **R. A. Witthaus**, A.M., M.D., Professor of Chemistry, Physics and Toxicology in Cornell University; and **Tracy C. Becker**, A.B., LL. B. Professor of Criminal Law and Medical Jurisprudence in the University of Buffalo. Vol. I. Octavo, pp. LV-996. Second edition, New York: William Wood & Co. 1906. (Muslin, \$6.00; Law sheep, \$7.00, net prices).

The Chemistry, Physiology, and Pathology of Uric Acid. With a discussion of the Metabolism in Gout. By **Francis H. McCrudden**, of the Laboratory of Physiological Chemistry, Harvard Medical School.

Proceedings of the American Medico-Psychological Association at the sixty-first annual meeting held at San Antonio, Texas, April 18-21, 1905. Charles W. Pilgrim, M.D., Secretary elect.

Eczema. A consideration of its course, diagnosis and treatment, with 146 prescriptions. By Samuel Horton Brown, M.D., Assistant Dermatologist in the Philadelphia Hospital. 12 mo. pp. 105. Philadelphia: P. Blakiston's Son & Co. 1906. (Price \$1.00).

A Treatise on Surgery. In two volumes. By George R. Fowler, M.D., Examiner in Surgery, Board of Medical Examiners of the Regents of the University of the State of New York; Emeritus Professor of Surgery in the New York Polyclinic, etc. Two imperial octavos of 725 pages each, with 888 text illustrations and 4 colored plates, all original. Philadelphia and London: W. B. Saunders Company. 1906. (Per set: cloth, \$15.00, net; half-morocco, \$17.00, net).

Progressive Medicine, Vol. II, June, 1906. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 368 pages, 31 illustrations. Lea Brothers & Co., Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00; carriage paid to any address).

Surgical Suggestions. Practical Brevities in Surgical Diagnosis and Treatment. By Walter M. Brickner, M.D., Chief of Surgical Department, Mount Sinai Hospital Dispensary, New York; Editor American Journal of Surgery, and Eli Moschowitz, M.D., Assistant Physician, Mount Sinai Hospital Dispensary, New York. Duodecimo; 60 pages. New York: Surgery Publishing Co. 1906. (Cloth, 50 cents).

A Compend of Operative Gynecology. Based on Lectures in the Course of Operative Gynecology on the Cadaver. Delivered by William Seaman Bainbridge, M.D., Adjunct Professor of Operative Gynecology on the Cadaver, New York Post-Graduate Medical School and Hospital. In Collaboration with Harold D. Meeker, M.D., Instructor in Operative Gynecology on the Cadaver, New York Post-Graduate Medical School and Hospital. 12mo, 76 pages. The Grafton Press, New York. (Price, \$1.00).

The Practice of Pediatrics by American and English Authors. Edited by Walter Lester Carr, M.D., Consulting Physician to the French Hospital; Visiting Physician to the Infants' and Children's Hospital, New York. In one octavo volume of 1014 pages with 199 engravings and 32 full page plates in colors and monochrome. Lea Brothers & Co., Philadelphia and New York. 1906. (Cloth, \$6.00; leather, \$7.00; half morocco, \$8.00, net prices).

Clinical Diagnosis. A Textbook of Clinical Microscopy and Clinical Chemistry. By Charles Phillips Emerson, A.B., M.D., Resident Physician in John Hopkins Hospital; Associate in Medicine in the John Hopkins University. Octavo, pp. 661. Illustrated. Philadelphia: J. B. Lippincott Co. 1906.

The Prophylaxis and Treatment of Internal Diseases. By F. Forchheimer, M.D., Professor of Theory and Practice of Medicine and Clinical Medicine in the Medical College of Ohio (University of Cincinnati.) Octavo, pp. 669. New York and London: D. Appleton & Co. 1906. (Price, \$5.00, net).

Report of the Commissioner of Education for the year ending June 30, 1904. In two volumes. Washington: Government Printing Office. 1906.

Blakiston's Quiz Compend. *Materia Medica, Therapeutics and Prescription Writing.* By Samuel O. L. Potter, M. D., formerly Professor of the Principles and Practice of Medicine in the Cooper Medical College of San Francisco. Seventh edition, revised and enlarged. Philadelphia: P. Blakiston's Son & Co. 1906. (Price, \$1.00).

A Nonsurgical Treatise on the Diseases of the Prostate Gland and Adnexa. By George Whitfield Overall, A.B., M.D. 12mo, pp, 228, Illustrated. Rowe Publishing Co. 1906.

International Clinics. A quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A.M., M.D., Philadelphia. Volume II. Sixteenth series. 1905. Philadelphia and London: J. B. Lippincott Co. (Cloth, \$2.00).

LITERARY NOTES.

HON. DE ALVA STANWOOD ALEXANDER, M.C., of Buffalo, is the author of a work entitled "A Practical History of the State of New York," just from the press of Henry Holt and Company. It is an octavo in two volumes of over 400 pages each and contains interesting material relating to the politics of the Empire state from the constitution of 1777 down to the civil war period of 1861. Especially does it record in fascinating manner the rivalries of Hamilton and Clinton and Burr; of Tompkins, of DeWitt Clinton, and of Van Buren. To every person who would familiarise himself with the political history of this interesting and important period,—and who with intelligence would not?,—this work will prove a most acceptable and instructive addition to the library.

MESSRS. W. B. SAUNDERS COMPANY announce for publication in the early fall the following works: Keen's Surgery, Its Principles and Practice (Volume I); Sobotta and McMurrich's Human Anatomy (Volume III); Webster's Textbook of Gynecology; Hill's Histology and Organography; McConnell's Pathology; Morrow's Immediate Care of the Injured; Stevenson's Photocopy (Retinoscopy and Skiascopy); Preiswerk and Warren's Atlas of Dentistry; Goepf's State Board Questions and Answers; Lusk's Elements of Nutrition.

The most important announcement is the new work on surgery, edited by Dr. W. W. Keen, complete in five octavo volumes, and containing over 1500 original illustrations. The entire work is written by the leaders of modern surgery—men whose names are inseparably associated with the subjects upon which they have written. Keen's Surgery is intended to represent the best surgical practice of today.

THE Summer number of *The Quarterly Journal of Inebriety* is a particularly notable issue of this interesting and valuable publication. It has been greatly enlarged and its typographical appearance is exceptionally attractive. Among the leading articles in this number are: The Relation of Alcohol to Tuberculosis, by J. W. Grosvenor; Physiological Action of Tea as a Beverage, by Sir Lauder Brunton; Morbid Predisposing Causes in Dipso-mania, by W. L. Howard; Reflexes from the Eye in Narcosomania, by T. H. Evans; The Alcohol Cult, by John Madden; Comparison of the Effects of Alcohol and Opium by W. H. Park; Two articles by the editor, Dr. T. D. Crothers, one on Unrecognised Toxic Insanities, and another on Farmfield Reformatory for Inebriate Women, also appear. Many pages of editorials, abstracts, reviews and comments complete the issue.

MISCELLANY.

THE STATE CIVIL SERVICE COMMISSION announces that it will receive applications until September 4, 1906, for the position of Woman Inspector of Nurse Training Schools in the State Department of Education. The salary is from \$1800 to \$2100. Candidates must be citizens of the United States, legal residents of New York State, registered nurses and graduates of a registered nurse training school with at least five years experience since graduation in supervision, administration or instruction in a nurse training school.

Application forms and particulars of the competition may be obtained by addressing the Commissioner at Albany, of which Mr. Charles S. Fowler is the Chief Examiner.

IN view of the meeting of the Military Surgeons which is to take place at Buffalo, September 11-14, 1906 it becomes of the first importance to see that the guests are well housed or quartered while visiting the city. The Iroquois is the leading hotel in the center of the business section and is unsurpassed by any hotel west of New York City either in rooms or cuisine, or service. In the residential sections The Touraine and The Lenox are hotels of the first order and are administered by men of experience who take high rank as courteous hosts.

In the business and railroad districts The Broezel and The Stafford are well and favorably known as excellent hotels of their class, the rates charged in these latter two being less than in the others named. In any event no mistake will be made by any tourist or visitor to the city who secures accommodations at either of the houses named.

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

OCTOBER, 1906.

No. 3

ORIGINAL COMMUNICATIONS.

The Use of Local Anesthetics in Operations on the Chest and Abdomen.¹

By MARSHALL CLINTON, M. D., Buffalo, N. Y.
Lecturer in Surgical Pathology at the University.

THE great aim of surgery is to practise the art in such a manner as will utilise all the expedients known to science that may have a bearing on the effort to conserve human life. We experiment, try, adapt, or reject various suggestions that are offered for the relief of surgical conditions; reject some because they are technically hard for the surgeon and some because they seem needlessly hard for the patient. Ever since Schleich and his co-workers in the field of infiltration,—or better, pressure anesthesia,—efforts have been made to utilise in selected cases the knowledge they have handed down to us.

In his earlier experience with general anesthetics it was impressed on the mind of the writer that now and then one ran across a patient who had to submit to some relatively simple surgical procedure, who had a needlessly hard time in the earlier days of convalescence, if he was fortunate enough to escape alive. No doubt we see cases of very severe but relatively slowly invading infections where the patient has built up an immunity that is shown in lack of high temperature, rapid pulse and great prostration. In these patients, notably in lesions of the chest and abdomen, rapidly performed slight operations under general anesthetics are followed by an apparent tearing down of the immunity and resistance the patients have so far built up. There seems to be some agent apart from the operative work responsible for the breakdown.

It is not hard to imagine when considering the many factors in the symptom picture of such a case what harm a general anes-

1. Read at the first meeting of the Eighth District Branch of Medical Society of the State of New York held at Buffalo, August 18 and 19, 1906.

thetic may do when used on such a patient. If we can utilise some method of local anesthesia that will not produce or be followed by surgical shock, it seems logical to believe that a greater proportion of these patients will recover than when operated under full surgical anesthesia. I say "full surgical anesthesia" advisedly, because it is the term employed in many textbooks to denote the stage of anesthesia arrived at by the use of chloroform or ether. We know, however, that in full surgical anesthesia pain is absent during that period, but that impulses which produce profound surgical shock are transmitted when the patients are under chloroform or ether.

A perfect system of nerve blocking must be devised before we can eliminate surgical shock as a necessary evil in our work. Fortunately, we have several men who are constantly striving to perfect their technic in methods usually followed by marked depression and their later statistics will undoubtedly compare better, case for case, with others in which less painstaking methods are employed. The writer does not feel as sanguine as some advocates of local anesthesia that this procedure will ultimately supplant all others, because so many cases seem unsuited to its employment in that general anesthesia offers slight risks in competent hands as well as gives the sweet oblivion that the average not too sick patient wishes. In the use of local anesthesia on the chest and abdomen of course we do not include minor surgery as that should always be done under the use of local anesthetics.

The first series of cases in which it was deemed advisable to use local anesthesia was on patients who had a massive empyema of the chest with rapid labored respirations, small soft rapid pulse, slight cyanosis and not much temperature. You have all seen them; and seen them snuffed out following an anesthetic in a few hours after operation.

My first case was done with a 2% solution of cocaine on a young girl who looked much sicker than her pulse rate and temperature suggested. A line along the skin, into the muscles over the rib and into the spaces above and below the rib, was injected with cocaine and after waiting 20 or 30 seconds an incision was made down to the rib and through all structures. This was followed by considerable pain, in fact excessive pain, so it was necessary to try and recocainise the operative field. When five minutes had elapsed it was found that manipulation of the wound area produced no pain. Then a bone forceps was passed around the rib and the rib cut. This again was extremely painful to the patient, and mentally so to the operator. After removal of the piece of bone it was found that the pleural surface was very sensitive and could not be touched without further cocainisation.

After this was done a very small incision was made into the pleura and the pus slowly evacuated with the gloved finger acting as a valve, a careful watch being kept on the general condition of the patient. It was noticed that this patient was spared the usual hours of severe surgical shock and depression that always follow this operation when done under ether or chloroform. Instead, her convalescence started when she left the table.

In the analysis of that first case we find good physiological and good anatomical reasons why the procedure was not more successful in stopping pain. We know now that local anesthetics, to be of best use, must be infiltrated under pressure enough to measurably distend the tissues, and not simply injected into tissue spaces as we give an ordinary hypodermic. The sensory nerves of the chest and abdomen except at the lowest border come from the twelve pairs of costal nerves; these pass along the upper border of the rib next below and very quickly give off muscular branches that penetrate the muscles. The cutaneous branches perforate to the skin in front of the axillary line and close to the sternum. Shorter branches pass out through the muscles of the back near the spine. Also, we find them in the axillary line and in front of the subcostal muscles covering them. Long branches pass along on the posterior surface of the rib. These must be remembered and most carefully infiltrated if we would accomplish successful anesthesia.

Since the initial case this method has been used by the writer in ten or a dozen other cases with most satisfactory results. Every operation is done with the patient lying flat on the back, with the side projecting over the edge of the table. This is harder for the operator for the operation has to be done up hill, but there is no danger of drowning the patient by reason of a ruptured bronchus. A recent case, a child two and a half year's old, was operated at the children's hospital in this manner and when I say the child did not scream once through the operation you will believe that the procedure was successful in preventing pain. Two and a half years' old children, that have been sick for some time, do not hide their emotions.

The next class of patients in which this method seems particularly indicated is in any abdominal lesion where there is an accompanying stercoraceous vomiting. The writer has seen three patients when under chloroform drown in their own vomit, and this when the stomach had been supposedly emptied by a tube. From the comparison of recent results with local anesthesia as against general in strangulated hernias of 48 or more hours standing, we find that more of them recover when done with cocaine. In the very desperate cases the best results seem to follow opening the sac

under cocaine, enlarging the ring, leaving the gangrenous gut in situ and opening it. If patients will not recover under this least of interference it is tolerably certain they will not recover after resection of the gangrenous area and closing of the hernia under chloroform. Later a closure of the artificial anus may be done safely.

Sometimes one meets with slowly growing very large appendiceal abscesses that have produced such a condition; in which case one hesitates to use a general anesthetic. In cases of this kind local anesthesia is just as satisfactory as in opening the chest, and the writer some months ago evacuated an abscess in this way and later under chloroform removed a large inflamed appendix.

Ordinarily we do not associate gall-bladder surgery with local anesthesia, but in getting ready to operate a patient with a long standing cholecystitis, a cholangitis edema of the extremities and ascites, it was considered advisable to try cocaine as the patient's pulse at the wrist was almost non-existent. It was found, however, that it was impossible to entirely anesthetise the parietal peritoneum as the ascites would dilute the cocaine swabs held against it, so the operation of opening and fixing a drainage tube in the gall-bladder was completed under a few whiffs of chloroform. This patient had practically no post-operative shock.

Now as to the method of employment. I believe that it makes much less difference what anesthetising solution you use than how you use it. To successfully anesthetise by cocaine a considerable area, either you must inject a strong solution such as 4% and wait five minutes for it to be thoroughly absorbed, or else if a weak solution is used it must be injected forcibly, distending the tissues so that they present the picture of a profound edema. In a case of a very old woman with a strangulated femoral hernia of over forty-eight hours' duration no cocaine was available when the patient was prepared for operation. As a substitute, a weak solution of morphine was prepared and this infiltrated into the tissues. She never made a protest until the peritoneum, which had not been properly injected, was nicked.

To try and satisfy my own mind as to the relative importance of the solution used, or the manner of using it, I had a patient prepared for a double herniotomy. With a large syringe and a small needle the skin was infiltrated with plain sterile warm water. Next the fatty tissue was blown up and then an incision carried to the external oblique. The patient said he didn't feel anything. By ballooning up each layer of muscle and fascia with warm water and massaging it before it was cut, it was found that anesthesia was as complete as if a strong cocaine solution had been used.

In conclusion I would say that,

1. Certain cases of profound sepsis, notably empyema and localised abscess of the abdomen, are more safely attacked under local anesthesia.
2. The method of usage is more important in achieving good results than the agent used.

516 FRANKLIN STREET.

The Management of Pulmonary Tuberculosis.¹

By J. C. YOUNG, M. D., M. R. C. S., M. R. C. P., of Cuba, N. Y.

Prevention is better than cure. These are words which have been both echoed and scorned by thousands for a long lease of years. But in this age it becomes the physician's duty to prevent as well as cure. While it is not possible to cure every case of tuberculosis even with the best means at our command, yet it does seem possible that with the present available methods every case, if we except those of possible hereditary transmission, could be regarded as a preventable one. I will incidently refer again to the influence of heredity but my remarks will be confined mostly to the treatment of those cases where prevention has had no opportunity, or if so is not fully carried out and therefore not entirely satisfactory.

As we search the records to find the causes of death in mankind we find on an average one word written in every seven as the cause, and that word is tuberculosis. Nor is that all: the loss in wealth to individual possessors of the disease and mankind at large is something wonderfully enormous.

Over and again we have known many persons who have said they would give all their possessions if they could only thereby purchase health. In no disease that we can mention is there any greater sums of money expended for cure than in cases of tuberculosis.

The question is often asked the medical man: "Is consumption ever curable," and I am glad to be able to say that the answers come thick and fast in the affirmative from the best authorities in the civilized world. Entrusted then with a case of tuberculosis the question naturally comes to our mind, is this particular case a curable one? Now it is not right and not enough for us to say "Well if we could place the patient under the care of some one who makes a specialty in this line and who has spent years of time and thought and study in this and kindred diseases then the chances of recovery would indeed be very great," for we know perfectly well that it would be impossible to place under their care

1. Read at a joint meeting of the medical societies of Allegany and Cattaraugus, N. Y., and McKean, Pa., at Rock City, N. Y., July 17, 1906.

and observation anything like the number that comes to us for relief.

The question then for me to ask myself and for each one of you to ask yourselves is this: "Can I cure this disease in this particular patient and will I do all in my power to bring about such a result." The result will depend very much upon the earnestness with which both patient and physician enter into the struggle and very much upon the coöperation of both physician and patient. While I know that it is not always best for patients to know all that is known to us about their real condition, yet given a case of tuberculosis after the patient has reached the years of understanding, or later during these years when the real work of life is being done, we should be frank with them and tell them what disease they have, both for their own protection and the protection of those around them and for our reputation.

When a patient, however, once knows he has consumption he must be encouraged to look upon the bright side, and all the hopes that the facts in the case will warrant must be held out to him. To hold out hope, however, when there are no prospects cannot be too strongly condemned. I have often thought that one reason why tubercular patients retain their hold upon life so long is because they are so hopeful and expectant unto the end. Many tubercular patients are making plans and calculations today for the future, when they get well, and it is inadvisable to encourage them in false hopes.

CLOTHING.

There are four other points I wish to mention briefly. First, of the clothing. If this is left to the patient's ideas, fancy, or judgment it is invariably wrong. These persons reason thus: "I take cold so easily that I cover up very warm. I am wearing January clothing in July and in January I wear nearly double the amount worn by other members of the family." The result is that the body is kept in a constant state of moisture and upon every exertion, exercise being so important to tubercular patients under certain conditions, it brings on a profuse perspiration and it is not uncommon to find the under garments of such patients completely saturated with moisture. Patients therefore should be instructed as to their clothing.

Soft woolen should be worn the year round, the kind which will readily absorb moisture but is not too heavy. It is better to avoid chest protectors but if worn at all they can be so adjusted as to be easily removed when indoors and this should be insisted upon. The outer garments should be good protectors but should be made so they can be removed readily and replaced as occasion

requires. Changes in the extremes of weather should ever be met with suitable clothing. Women should be induced to sacrifice their ideas of clothing or fashion for health. In driving or when lying in open air clothing should be worn suitable to protect the person. The tendency to take cold easily which is ever present in tubercular cases is greatly increased by the excessive clothing generally worn. The one thing that the patient is planning to avoid is greatly increased by the means used to prevent it.

DIET.

All physicians are agreed that one of the most important elements in the treatment of tuberculosis is a good supply of nourishing and easily digested food. Anything which disturbs digestion or lessens the appetite should be prohibited at once, for food is more important than medicines. The patient should have plenty of food placed before him in the most inviting and tempting manner possible. A good cook using proper judgment about the arrangement of the food table is often of more benefit than the physician himself. Meat, including fish, poultry, game, oysters, milk, eggs, fruit, vegetables, breadstuffs with hot soup for dinner is a desirable list from which to select. We can hardly give too much milk; if the patient can digest it three to six pints a day may be allowed. When raw milk cannot be borne boiled milk or koumiss may be substituted. Forced feeding with a tube is often valuable when other means fail and should always be tried when indicated. I fully concur in the opinion of those who claim the same quantity of food required for a healthy working person is not sufficient for a tubercular patient. Our aim in tubercular cases should be to administer more than is required so that not only the waste may be met with but the tissues built up and the weight increased if possible.

Some kind of hot drink in the morning before arising aids in the expulsion of mucus. The question of stimulants in tubercular disease has often led to sharp discussions and a wide difference of opinion, but it can be safely stated that it is unwise to use alcoholics in incipient cases. If, however, they have the habit persuade them to abstain from it as soon as possible. In far advanced cases where the result is sure to be fatal a glass of hot milk with whisky in it at bed time or during the night will often afford the patient a better nights rest. In this use of alcohol there is no danger of creating the habit. Look well then to the feeding of tubercular patients liberally for it is one of the most important features in the management.

HYGIENE AND CLIMATE.

Here one might speak beyond the limits of any paper and not exhaust the subject. Want of exercise and lack of fresh air will

work alike to the detriment of the wealthiest banker or with the poorest working girl. A sleeping room should be capable of the most thorough ventilation and have at least 1200 cubic feet of air space. Patients should sleep alone. They need all the air the room contains and it should neither be shared by others nor should lights be burned in the sleeping room. Inhalation of impure and confined air is one great source of infection.

I cannot speak of health resorts or different climates here. Unfortunately those who have spent much time in the study of these subjects are not all agreed, and I sometimes think that too much is made of these differences of opinion. All sorts of climates have at times been strongly recommended and all again have been either condemned or belittled. Recently some good authorities claim that climate has nothing at all to do with results but that they depend upon other measures. The writer believes that while he is speaking his own sentiments he is also that of others who have given the subject careful attention, in asserting that the climate which affords the greatest facilities for spending the largest amount of time in the open air and where it is neither excessively hot or moist is the one most likely to lead to the best results.

The patient should become so accustomed to out-door life that he can remain in the open even during the most unpromising weather. Out door games, exercises, and amusements should be cultivated, and occupation with the poor and habits with the rich must be given up if they interfere with out door life and exercise. Where a cure has followed a change of climate or a change in occupation, probably the factor which deserves the most credit has been the open air life which either from disposition or environment has been forced upon the patient. Impress upon the patient that climate or a health resort is nothing if he maintains sedentary habits, late hours, or a life of either fashion or pleasure with a dislike to open air.

The open air treatment has become almost a household word, yet people very rarely understand its real meaning, and it will be sometime before all can be educated to know that it means something more than to open a door or a window for a few moments and we must do all we can to overcome such objections.

If I were asked which is best for a tubercular case, summer heat or winter cold, I would say by all means winter cold if open air is coupled with it. Pure cold air quiets cough, lessens fever, and increases the appetite. Dry cold air expands as it is warmed in the lungs and is beneficial in that way. Fresh air is of equal importance to food and perhaps to the recognition of this fact is due the improved methods in the management of tubercular

cases. Probably Dr. Henry McCormac, who did so much with voice and pen, will ever be mentioned as the pioneer who pointed out the evils attending the rebreathing of expired air. From this has sprung up ideas in regard to the open air treatment which have done more to prevent or cure tuberculosis than any other fact that could be mentioned.

The open air treatment then cannot be spoken of in too glowing colors. Instead of keeping these patients carefully protected from fresh air as was formerly the case they should be kept summer and winter, rain or snow, in the open air. Of course patients should be under cover and protected from storms but the most free ventilation should be carried out in the daily life. The open air treatment does not mean that a patient must exercise sufficiently to exhaust his strength. While the temperature is at any time above 100° it is better for him to be kept at rest.

Sanitariums and tent colonies for the treatment of tubercular cases are of recent origin. The first one in America was erected 20 years ago with capacity for nine patients. Now there are between 140 and 150 for the same purpose. That of itself speaks volumes to be placed on the credit side of the ledger to those institutions. I cannot enter into details but there is no doubt that this has given the best results of any line of treatment ever proposed. The wards of a general hospital should no longer be used for tubercular cases as the other inmates are thus placed in an atmosphere of danger.

But, unfortunately, very many cases cannot avail themselves of a change of climate or a health resort or a sanitarium or tent colony life. It is a fact that 25% of the families in the United States are living on \$400 a year or less. Now, from out of these homes and among these families quite a large percentage of tubercular patients come, hence they must remain under the care and observation of their family physician until relieved by art or released by death. States should take cognisance of this fact, for a nation's humanity and wisdom is nowhere better shown than in the care and safety it gives its helpless and dependent people.

But under present conditions we should do all for these patients that we can, and let it not be said by those who follow us that our eyes were too dim or our enthusiasm too cold, to recognise the fact that we could have saved many lives at home and protected many others from the disease, had we carried out the measures we were able to command. Recently some have advocated the home treatment for tuberculosis, claiming that if a case is curable at all it can be cured at home; and that those who go out from these institutions much benefited stand a very poor chance

of remaining so. Be this as it may, I do think that home treatment and open air treatment will, for many reasons, become warmly and closely united in the near future.

No patient, so long as he lives, should under any condition or any circumstance be excluded from fresh air and the family physician is the one to teach this. Patients can be taught at home about the dangers of the sputum, a proper receiver for it: that floors should not be carpeted and other similar precautions. Patients should be taught that a cough which is not for the purpose of expelling mucus is both useless and worthless.

TREATMENT BY MEDICATION.

I believe that the successful treatment of this disease is often seriously retarded, if not altogether lost, in the blind belief of the efficiency of many drugs which, in the present state of our knowledge, should play a minor part, the main reliance being upon measures already enumerated. But while we hope and expect that better days will come for the unfortunate tubercular patient in the way of medication, yet no years in all the history of the past have been nearly as good as the years which have given us a very satisfactory improvement over those of bleeding, blistering, codliver oil and whiskey. The treatment by drugs since the days of the discovery of the tubercle bacillus has been one of ceaseless activity, in an attempt to either destroy the germ by germicides, or to render the soil in which they live an unfit place for their existence.

The glowing results sometimes heard of this or that drug should be received with caution. I will venture to say that no beneficial results have been obtained from any drug unless hygienic and climatic measures have been employed at the same time, and it is not safe to substitute the measures enumerated for any known drug.

In tubercular diarrhea either bismuth, or bismuth subgallate in doses of one to two drams daily, a tablet of calomel one grain and opium half a grain, often give satisfactory results: and where these fail other remedies will be equally futile in most cases. For pleuritic pains it is a good plan to immobilize the chest with adhesive strips as in fractured ribs. Creasote in full doses is still used to benefit cough and aid expectoration but no longer as a specific. A few drops of formalin on a small dish and inhaled through a long paper funnel is useful. In recent years ichthiol in capsules 15 to 50 gr. daily has largely supplanted creasote and can be used when the latter is not tolerated, and it is supposed to play a very successful warfare against the bacilli.

In hemorrhage first of all inspire confidence in the patient and thus, if possible, allay fears; rest in bed; ice to the chest;

nitroglycerin, atrophica and morphia hypodermatically with liquid diet offer the best chances of relief.

A good bitter tonic about 20 minutes before meal times with pepsin after meals should generally be used. While it may be stated as a general fact that improved methods of treatment even in medication have worked wonders over our former ways, still I am sure that we are far from the ideal for which we have been searching so long and may never find. It was supposed once for a brief period, as will be remembered, that it had been found.

Sixteen years next November I happened to be in London, when Professor Koch came over from the continent, and announced his discovery, in his ever memorable address, to a large and enthusiastic gathering of the medical profession. After giving his experiences and finding that in six to eight weeks the patients were entirely free from disease he used these words as near as I can recall them: "These experiences lead me to believe that tuberculosis in the beginning can be cured with a certainty by this remedy, tuberculin." Now, the discovery of an agent which did possess such marvelous power over the tubercle bacillus and by such a renowned man of research as Koch will ever leave a wonderful page in the history of medicine.

Owing to the intense public and professional interest taken in Koch's remarkable researches and to the bitter disappointment which so soon followed the use of his tuberculin, the remembrance of that brief period will never be effaced from memory.

While the use of tuberculin is not abandoned by all at the present time yet it has not been found to do was expected of it at the time of its discovery. The caution displayed by Koch and some of his followers has not always been exhibited by some members of the medical profession, and this has done very much to bring discredit on a really meritorious remedy. This disappointment naturally renders the acceptance of the newer remedies in the same direction with an unusual amount of hesitation. Still it does seem that great progress will be made sometime in this direction, when we see the activity displayed by so many members of the medical profession working towards one result—namely, the destruction of the tubercle bacillus.

It is claimed that tuberculosis has existed since man inhabited houses. Hence, what we call our beautiful and comfortable homes the result of the architects skill and expenditure of vast sums of money, are at times the harbingers of tubercular germs which infect many individuals. The practical destruction of the North American Indian by tuberculosis alone is largely if not entirely due to his exchanging his rude out-of-door life for wretched hovels or wigwams, the best they were able to do in imitation

of the houses erected by the white man. I mention this to emphasise again the importance of fresh air as obtained from out door life.

Wild animals have been inoculated with the tubercle bacillus. Divided into equal numbers, one group shut up in a close room, well fed with but little sunlight, or fresh air, invariably succumbed to the disease. The others being allowed freedom and wild life invariably recover. This is another evidence of the value of open air life.

“Duhrssen Scnitt” or Vaginal Cesarean Section in the Treatment of Puerperal Convulsions and the Report of a Successful Case.

By HERMAN E. HAYD, M. D., M. R. C. S., Eng., Buffalo, N. Y.

THE following instructive case is contributed to the literature of the management of puerperal convulsions.

August 13th, 1906, I was called to see Mrs. Edith K., primipara, aet. twenty-three, who was in convulsions and I found in attendance Drs. Allen and Baker of Williamsville, N. Y. The first convulsion occurred at six A. M., and she had had seven up to two P. M. Large doses of tinct. veratrum viridi had been administered and half grain doses of codeia hypodermically. She had also taken five drops of croton oil by mouth in solution with olive oil.

After cleansing the vagina and giving a bichloride douche, a vaginal examination was made, when it was found that the os was hard, but slightly dilated and admitted one finger, and there was also a show of blood. An attempt was made to forcibly dilate the cervix, but this was at once abandoned, not only because it was impossible to make any impression upon the tissues, but the irritation immediately brought on a terrific convulsion. A second convulsion occurred in about half an hour and it was then decided to remove the patient to the German Deaconess's Hospital for operation. The baby was alive, as was made out by stethoscopic examination over the bare skin, and the heart beats being strong, and the term of pregnancy about eight and a half months. While in the ambulance en route to the hospital the patient had two more seizures. She reached the hospital about five-thirty P. M., and was at once taken to the operating room and prepared for operation.

Chloroform was administered, the bladder was emptied and the urine quickly examined, which was found to be nearly solid by the heat and nitric acid test. After shaving and scrubbing the parts thoroughly, the cervix was seized by two volsellum forceps

and pulled well down into the vagina, and with a scissors a long anterior incision was made up to the vault. A transverse cut was then made across the roof of the vagina and the bladder and soft parts were quickly separated and pushed well up upon the uterus. Upon passing the finger into the uterus a few fibers of the sharp internal os, or Bandel's ring, remained undivided. These were severed with a blunt bistoury well up into the body of the uterus. There was no hemorrhage. The membranes were then broken and the position of the child accurately determined—left occipito-anterior—the forceps applied and the delivery was slowly and cautiously effected but with considerable force and some difficulty. After the head had engaged in the vagina and was well upon the perineum, the forceps was removed, the head and shoulders were carefully delivered, and the baby—a boy weighing six and three-quarters pounds—was given at once to the assistant, who spent at least thirty minutes in energetic and resourceful efforts at resuscitation.

The placenta was delivered in due time and the cervix was immediately sewed up, as were some tears in the vagina due to the blades of the instrument—and a piece of iodoform gauze was passed up into the uterus through the united cervix. The patient was put to bed in excellent condition. A quart of salt solution was now injected into the loins, in the hope of further flushing the kidneys, and a hypodermic of morphia— $\frac{1}{4}$ grain—was ordered every third hour.

At seven-thirty P. M., she had a convulsion and also a slight one at four-thirty A. M. The next day, August 14th, her condition was excellent; pulse 86, temperature 100°. The morphine was discontinued, and high-up rectal injections of a pint of salt solution were administered every fourth hour. The bladder was emptied by catheter every six hours, and a copious supply of urine was obtained each time. In the evening she began to swallow water and then there was added 1 drachm of a saturated solution of sulphate of magnesia every half hour until free catharsis resulted.

August 15—temperature 99; pulse 72; condition excellent. Mind a little hazy, and taking water freely in large amounts.

August 16—temperature and pulse normal; mind clear. Milk was now administered and baby placed to breast. Gradually a semi-solid diet was given and on the seventeenth day the patient left the hospital well and strong, with the vagina and cervix healed perfectly.

This case demonstrates clearly, first, the wisdom of emptying the uterus as quickly as possible in a bad case of convulsions; and second, the ease and facility with which delivery can be accom-

plished by employing the anterior cervical incision of Dührssen. I am satisfied that without surgical intervention in this case we should have lost both baby and mother, because the patient had already had ten convulsions before the delivery was brought about, and was a primipara in whom after many hours of waiting and delay, dilatation had only commenced.

493 DELAWARE AVENUE.

Eyestrain and Crime.

BY GEORGE M. GOULD, M. D., Philadelphia.

BY the kindness of Dr. Geo. M. Case of Elmira, New York, Ophthalmologist of the Elmira State Reformatory, I epitomise from his paper read before the American Academy of Ophthalmology and Oto-Laryngology, August 30-31, and September 1, 1906, the following facts. The calculations are made from the diagnoses of the refraction of 400 inmates chosen as illustrative of less than 5000 patients examined during the years of his service. The report relates to inmates with:

Hyperopia, simple	68
Compound hyperopic astigmatism	27
Hyperopic astigmatism	37
With Predominant Hyperopia	132
Myopia, simple	37
Compound myopic astigmatism	19
Myopic astigmatism	18
With Predominant Myopia	74
Mixed astigmatism	7
Strabismus	10
Total with Ametropia and Strabismus	223
Of these the errors were corrected in	146
Uncorrected	77
	223

It is noteworthy that of these errors an astonishing proportion had very high degrees of ametropia, the defect in 53 cases being from 2 D. to 4 D., and in 37 cases over 4 D. In 10 cases the astigmatism was over 4 D.

It must be remembered that the rules governing these tests were such that in some ways make the results untrustworthy, but

that all the conditions imposed by the State demonstrate that only the most glaring defects were brought out. As a rule no mydriatic could be used, so that these are only the manifest errors. Anisometropia and heterophia were ordered to be ignored! Then the sole aim permitted was to give approximately normal vision in one eye only. It is of course well known by Dr. Case and by all competent oculists, that the ametropia which produces the most ruinous systemic reflexes is precisely that covered up by the accommodation and permitting in one or both eyes a fair or even good acuteness of 20-foot vision. This fact throws an astonishing and appalling light upon the handicap of these young criminals in attempting almost any work of civilization. If in 90 patients out of 400 the manifest errors were over 2 D., and if the manifest astigmatisms were 108, (45 over 2 D.) the argument is convincing that instead of punishing these afflicted young men, they should be rewarded by giving them accurate and scientific glasses, to enable them to make their living. The State in its infinite stupidity doubly punishes them both by imprisonment and by improper glasses. Such is governmental wisdom.

Put upon 108 out of any 400 moral and well-raised boys of 12 years of age, spectacles which would correct the ametropia of any one of these 108 boys of the reformatory, and they will either get into the reformatory, a hospital, or their graves, within a few years. Let the legislators or officers of the government read or work at any handicraft for one day with such glasses (creating the defects these boys have by nature) and there would be different laws enacted, at the next legislative sessions, and the administrators would see that they were executed! Have societies of learned ophthalmologists, have general medical societies, have penologists, asked for, or demanded laws and appropriations to give these abused boys vision and normal visual function to enable them to do work and live moral lives? The State will not only not pay the oculist, it will not let him do his work scientifically, it will not buy the glasses, it will not care to have the glasses fitted by an expert optician. What amazing blundering! It would be a money-making business if a private oculist and optician would take the job of reducing the State appropriations for criminal institutions 50 or 75 percent, easily done with preventing the ocular diseases and reflexes which directly cause crime in the young. Write ten hours with any compound hyperopic astigmatic spectacles of one, two, or three diopter strength, and be convinced!

What does the State do? Listen again to Dr. Case: He sent letters of inquiry to 123 penal institutions asking if visual acuteness was tested when the boy or prisoner was received; what were the results; were glasses prescribed; the effect on conduct,

etc.; were oculists employed; were appropriations made for such work, and the like. Facts were so profuse, interest in the subject was so intense, and conviction so manifest, that no answers were made by 63 institutions! "No facts to report," is probably the most charitable explanation. Dr. Case avers that in some institutions big baskets of all kinds of lenses are placed before the boys, and they are ordered to choose any pair they please. Thus is the science of Donders and of great ophthalmologists made practical! Of those who could or did reply, 62 percent have no oculist and only 5 percent have even an optician; only 16 percent have any appropriation for such work whatsoever. The entire affair is a farce, an absurd bit of opera bouffe at best, that should be laughed and buried out of the sight of self-respecting, or of business-like people.

Wherever there was any attempt to go at the subject in the most amusingly inadequate way the results on demeanor, conduct, school, or hand work, promptly showed great improvement, the percentages of such improvement ranging from 15 to 54 percent, and averaging about 40 percent. The senior physician at Elmira, Dr. Frank L. Christian, writes: "*The general progress of the men, after receiving glasses was greatly improved, and far better results were obtained than previously.*" And this, forget not, was after correction of manifest errors; without cycloplegia; for the purpose only of giving fair visual acuteness with one eye; muscular imbalance and astigmatism usually ignored; and differences of error of the two eyes (anisometropia) not considered. Even under these ruinous conditions Nature responds a little, and there is a degree of betterment gained. What would be the gain if accurate and thorough-going work were permitted,—if it were demanded! At the same time Government prides itself on being a democracy, the medical profession prides itself upon being scientific, and the people pride themselves on knowing how to conduct an enterprise in a businesslike manner!

1722 WALNUT STREET.

SELECTION.

Observations Based upon Five Hundred Operations for Appendicitis.¹

By THOMAS B. EASTMAN, M. D., Indianapolis, Ind.

[From *The Lancet-Clinic*.]

IT is the purpose of this paper to note certain observations made by the writer in a series of five hundred cases of appendicitis, the operations having been performed either by the writer or his

1. Read before the Indiana State Medical Association, May 24, 1906.

brother, Dr. Joseph Rilus Eastman. For the most part, the ideas expressed are in accord with the accepted teaching; but where they do not accord with such teaching, no apology is offered, as the paper purports to represent nothing more or less than opinions of such value as may be formed in a careful study of such a number of cases. No radical views are expressed, and while some competent operators may disagree with all or part of the writer's ideas, they at least have whatever value may attach to an operating room rather than to a laboratory or deadhouse experience.

The importance of prompt and early diagnosis can hardly be overestimated, and that the mortality following operations for appendicitis has been so greatly reduced during the past few years is due in no small degree to the attending physician, who, from his own clinical observations and from the teaching of operators, is gradually coming to realize that there is a time above all others when operation should be made.

The refusal of the patient or family to submit to operation has often served to delay recommended measures for relief, but the attending physician has not always appreciated his responsibility in this matter, and it is a source of regret that some have not yet learned the lesson. On the other hand, the number of those physicians who have seen fit to place themselves behind the shield of what they are pleased to call "conservatism" is most happily decreasing. We take it that to be conservative means to conserve life, and, so far as this disease is concerned, we are fully satisfied that this false conservatism has cost vastly more lives than has the most rampant radicalism.

The division of the course of the disease into hours and days according to its duration is not always reliable, as it is readily conceived that pathological processes do not proceed by the clock, but for purposes of convenience we may consider the time for operative procedure in four periods: First, within the first forty-eight hours; second, from the end of this period to the fifth or sixth day; third, from the sixth day on; and fourth, the interval. At the present day, one may say without fear of any considerable opposition that the early operation is unquestionably and unequivocally the operation of election. The condition in and around the appendix, the limited area of inflammation, the absence of adhesions, the absence of pus, the fact that we operate almost surely before perforation or gangrene shall have occurred, the general condition of the patient, the unlowered vitality, the uninvaded lymphatics, and last, but not least, the low mortality resulting from operations made in this stage by competent men,* seem to the writer almost to preclude argument upon this question.

It is in the second stage, however, where it behooves the surgeon to use his most careful judgment as to the time for surgical

intervention. In this stage, while the operation should be made in a large majority of cases, the dictum, "operate as soon as the diagnosis is made," cannot be absolute.

Take a case of appendicitis of seventy-two hours duration, which is not to be operated, and consider what the subsequent history of the case may be. The further pathologic processes may be divided into two classes: first, those favorable to the patient; and second, those unfavorable. Among those favorable, we have:

1. The infectious material may escape into the cecum via the appendix.

2. The inflammation may become circumscribed and limited to the lymphatics in the immediate vicinity of the appendix.

3. There may result an extra-appendiceal abscess which may rupture into an adherent coil of intestine.

4. There may result a quiescent abscess.

Among those unfavorable:

1. There may develop a diffuse general suppurative peritonitis.

2. If there be a circumscribed abscess, there may be an iliac thrombo-phlebitis and infection of the venous circulation, resulting in embolism infarcts and secondary abscess.

3. A portal venous branch may thrombose and hepatic abscess or pylephlebitis result.

4. The infection may by various channels reach the genito-urinary tract, gallbladder, liver, or lung (after Murphy).

In so far as those conditions which have been noted above as unfavorable are concerned, it is readily conceded that the sooner operation is made the better. The same may be said concerning certain of those conditions in the class noted as favorable, but the cases which should be considered as exceptions are those in which the patient shows but little general invasion of the infection, the pulse has continued good, the temperature curve is satisfactory, the secretions or excretions active and the patient's general condition good. In these cases, while it may be realized that an abscess is in the process of development, it is at the same time evident that nature is more than holding his own against the disease.

Organic adhesions do not develop under five days, and in a certain proportion of cases, where nature is thus walling off a pus cavity and protecting the abdominal cavity, it is occasionally unwise to interfere and break up these adhesions. The wisdom of the old maxim, "*ubi pus ibi evacua*," is not questioned, but the

wisdom of evacuating this pus, as must often be done by the best operators, into the free and hitherto uncontaminated abdominal cavity, is most seriously questioned. In many of these cases, let alone, the abscess sac becomes adherent to the abdominal wall and the best of drainage may be accomplished by a simple incision through this structure, or, at least, it develops in such a way as to render drainage possible without entering the cavity. In the third and fourth classes of cases there is generally no question as to the advisability of operation, but even some of these third-class cases may be left to the interval.

In cases where we do not expect to find pus or use drainage, we employ the gridiron incision, severing all structures in the direction of their fibres, and in this connection it is well to point out that in enlarging such an incision the tendency to cut transversely the fibres of the muscles, the operator not taking the trouble to split the muscle fibres, as was done in the initial operation, is bad, as such procedure is likely to result in an unnecessarily weakened abdominal wall. In abscess cases the incision is made straight through the wall, and its location with reference to the abscess sac depends upon whether or not the sac is expected to be found adherent to the abdominal wall or whether we expect to evacuate the abscess well toward the flank, as it were, between the weather boards and the plaster.

The gridiron incision is impracticable in abscess cases, since being, in a way, a self-closing incision, it interferes with the drainage. We make large incisions to the end that we may have a good view of all the tissues involved in the pathologic process. The incision made, the appendix is located as follows: Placing the finger upon the peritoneum at the right of the incision and following the peritoneum around the flank, the first intestine to come in contact with this finger must necessarily be the lower portion of the ascending colon. The cecum is then easily grasped, withdrawn through the wound, and the appendix exposed, or if the cecum and appendix be adherent, the latter may easily be located once the cecum is thus under the finger. In our opinion, it is important to withdraw the cecum sufficiently well up to have the appendix well in view. To attempt to work in the abdominal cavity not only tends to render the procedure more difficult, but renders infection more probable. But little cecum need be exposed, and that little is easily protected. Of course, this cannot always be done where adhesions are dense. In clamping the appendix, we use either a simple hemostatic clamp or the forceps with the protecting shield designed by my brother. In cutting off the appendix with the cautery, the heat imparted to the jaws of the forceps tends to sterilize all the stump within the grasp of the forceps. Where we use a simple clamp, we do not use car-

bolic acid to cauterize the stump, because, on account of the small amount of tissue reached by the acid, this procedure looks like child's play.

In tying off the meso-appendix it is well not to have the ligature approach the wall of the appendix too closely, for, if it does, it renders the turning in of the stump difficult. If it is introduced close to the wall of the appendix, the meso-appendix should be dissected down to a point at least a quarter of an inch below where the lower border of the clamp is to be placed.

In our work on the appendix, as well as in all our intestinal work, for the twelve months preceding February 1, we had used the Pagenstecher celloiden linen. Since the latter date we have used von Brun's hemp. Either one of these suture materials is vastly superior to catgut for several reasons. They are much more easily manipulated, they do not curl up in the hands, they tie with a firmer and smaller knot, their caliber is much smaller, they allow of a much more accurate coaptation of the parts, they are of such firm texture as to render invasion of bacteria improbable, they are of positive tensile strength, and are capable of unquestionable sterilisation.

It is important that the purse-string suture be placed at sufficient distance from the clamp to insure perfect inversion of the appendix. The cecum is generally large enough, so there need be no fear of narrowing the lumen. We regard the placing of a ligature around the stump as bad practice, as it leaves an infected area tied off and with no chance of drainage. We have in certain cases, owing to the dense adhesions which rendered the withdrawal of the cecum from the cavity impossible, in emergency operations by lamp-light and in diffuse septic peritonitis, trusted to the simple ligature of the appendix. However, in all these cases we have used drainage. We leave the purse-string suture and the ligature around the meso-appendix long and bring them together in such a way that the cut edge of the meso-appendix lies in contact with the cecum at the point from which the appendix has been removed, and thus leave absolutely no raw surfaces within the cavity.

The technic in simple not infected cases has reached a stage where it may be considered satisfactory. It is in the infected cases where we may hope for improvement. These cases may be divided, according to Van Buren Knott, into three classes: First, the more or less localised peritoneal infection in which the general peritoneal cavity is not protected by limited adhesions; second, an infection sharply localised and circumscribed, the general cavity of the peritoneum being protected by a wall of adhesions; third, a diffuse, widespread infection of the entire peritoneal cavity.

The first class embraces those cases in which, as stated above, we occasionally see fit to delay. Oftentimes the existence of this condition is not suspected. The appendix is removed, and every point to which fluids may gravitate is carefully inspected and as carefully mopped out. In females a vaginal puncture is made and drainage instituted by this route. In males we use a large split rubber drainage-tube carrying gauze, making sure that it not only reaches the dependent pouches, but that it will remain there, and that, if possible, the movements of the intestines will not bend it so as to obstruct the drainage. The tube should be of stiff and not easily collapsible rubber. We never trust to simple gauze drainage, for the reason that it rarely drains. Oftentimes hernia will result from the use of large drainage-tubes, but what doth it profit a man if he prevents a hernia and gets a funeral.

In the second class—that is, where the infection is well walled off—our one aim is to drain the abscess without exposing the general abdominal cavity, and with careful study as to the point for incision this can be more commonly done than is generally believed. Where the drainage cannot be instituted without invasion of the general cavity, we feel that considerable time spent in building up a cofferdam is time well spent. Unless the appendix presents plainly, and can be removed easily, we do not remove it, and make a habit of stating to the patient prior to the operation that he or she may require a second operation for the cure of the hernia or removal of the appendix, or for both. In cases where the general cavity has been avoided, simple drainage by tube covered gauze is used, but where we have invaded the peritoneal cavity we take pains to see that the abscess drains externally and not into the cavity.

In the third class, that of diffuse septic peritonitis, wherein we have that vicious form of inflammation which involves the whole peritoneum, there are two cardinal points in procedure—rapidity of operating and drainage that drains. We make a free median incision, and, if the patient has strength enough to warrant it, we remove the appendix, simply tying off the meso-appendix and the appendix without any attempt at inversion. We then cleanse the cavity, looking well into all dependent pouches. In the female we use the vaginal puncture and drain as above described. In the male we place the tube covered gauze in the recto-vesical pouch and out the lower angle of the incision. In short, we do as little as we possibly can and still remove the cause and establish thorough drainage. In all our abscess cases we place our patient in the exaggerated Fowler position, and believe that the introduction of this detail in the after-treatment of appendicitis has had much to do with the present lowered mortality.

CLINICAL REPORT.

A Case of Large Pus Kidney, with Exhibition of Specimen.¹

By HENRY T. WILLIAMS, M. D., Rochester, N. Y.
Surgeon to Rochester City Hospital and Saint Mary's Hospital.

MRS. A. A. F——, widow; age 75 years. Always has been in usually good health except occasional colds and indigestion, but no serious illness. I first saw her April 6, 1906. She had been ill for several days suffering from a hard cold in her head and pain in the bowels, mostly in right side of abdomen, and some vomiting. When she came under my observa-



FIG. 1. WILLIAMS: LARGE PUS KIDNEY—FRONT VIEW.

tion her temperature under the tongue was 102° F.; had been able to take but little nourishment on account of pain in abdomen and nausea and occasional vomiting. The abdomen was sore and very tender upon pressure, especially over the McBurney point area where a large mass could be felt extending slightly beyond the median line and into the loins on the right side. Dulness on percussion and elastic and fluctuating were marked, more so over the McBurney point. The next day, April 7, dulness and tenderness had extended over a larger area and was more elastic and fluctuating. The urine, 1022 sp. gr., contained a trace of albumin, but no casts and no pus. Temperature 101.4-5; bowels had moved freely; nausea and vomiting increased.

1. Specimen exhibited at a meeting of the Hospital Medical Society of Rochester, N. Y.

I operated upon her that night. While under the anesthetic a large irregular shaped mass could be felt extending below the liver down to the lower part of the abdomen, into the right loins and back and beyond the median line of the abdomen, the most prominent part over McBurney point. The diagnosis was, tumor of the right kidney. A large median incision was made extending from three inches above pubes to three inches above the navel. The capsule was found to be very vascular, and several ligatures and hemostats were applied to stop the hemorrhage. It was noticed that the vessels were very much enlarged and sclerotic, (even calcareous), breaking frequently under the for-



FIG. 2. WILLIAMS: LARGE PUS KIDNEY—SECTION VIEW.
Note the straws inserted into ureter and renal vessels.

ceps and ligatures. The ureter was quite large and was tied with two ligatures and cut between them.

After the capsule had been divided the kidney was easily drawn out and the renal vessels exposed. These were tied with catgut ligatures but the vessels were so hard and brittle that they several times broke off, and finally were tied in mass after clamping them together with some of the surrounding tissue. While carefully lifting out the large kidney there was a sudden gush of dark blood. Dr. Boddy, who was assisting me, put his hand under the tumor and grasped the venacava which stopped the hemorrhage. The kidney was then rapidly cut off at its pedicle (where the ligature had been applied to the vessels) and removed. It was found that the renal vein had torn off from the vena cava;

both venacava and aorta were felt to be very hard and inelastic and seemed to be studded with calcarious deposits.

The tear in the venacava was grasped with forceps, but owing to its brittle condition, tore open again. A compress of sterile gauze was placed against the opening and other gauze compresses against that and strong strips of oxide of zinc plaster across the upper part of the abdomen holding them in place, whereupon the hemorrhage ceased. The rest of the abdominal incision was brought together with silkworm gut sutures. The patient rallied from the operation. Pulsation of the arteries of the feet could be plainly felt and the feet and lower extremities were normal in color, showing that the circulation was not interfered with. Owing to the condition of the venacava the left kidney was not examined.

The patient died from uremia 48 hours after the operation, only two ounces of urine passing per catheter after the operation. The kidney weighed twelve pounds. Upon opening the kidney it was found to be filled with a thick creamy pus, sacculated in places on outer part of kidney where the pus was gelatinous and in some places caked. The outer shell of the kidney as it may be termed, or pus sac, was only about 1-40 of an inch thick. A straw carried through the ureter and one through the renal artery passed directly into the pus sac. No evidence of any normal kidney substance remained. The case is interesting from the size of the kidney and from the amount of pus which it contained, and because of the thinning of its walls, the age of the patient and the fact that no serious symptoms or pain or high temperature existed until so short a time before operation. It also demonstrates what grave condition a kidney may reach without causing, for a long time, serious symptoms.

274 ALEXANDER STREET.

PROGRESS IN MEDICAL SCIENCE.

Pediatrics

Conducted by MAUD J. FRYE, M.D., Buffalo, N. Y.

LEUCOCYTOSIS IN WHOOPING COUGH.

CHURCHILL (*Jour. A. M. A.*, May 19, 1906) reviews the literature on this subject and adds the results of his own investigations, 36 cases having been studied. The patients ranged from 6 mos. to 17 yrs. The total leucocyte count was made in 29 cases. A general leucocytosis was found in all but one. The counts range from 10,000 to 112,000. Differential counts were made in

all cases, 30 showing a lymphocytosis; 15 out of 16 patients examined in the catarrhal stage had a lymphocytosis. The percentages ranged from 34.3, in a 5 year old child, to 93 in a 4 year old. The latter was the one with a total of 112,000, was a severe case, and came to the clinic at the height of the disease. A count made 16 days later showed a total of 32,600 with 64 per cent. of lymphocytes, and great improvement in all the symptoms.

The total number of cases studied upon which the author bases his deductions was 100. The following conclusions summarize the paper:

1. A general leucocytosis is present in almost all cases of whooping-cough.

2. A lymphocytosis, i. e., an increase in the number of lymphocytes is found in about 85 per cent. of cases at some time during the course of the disease.

3. A lymphocytosis is found even more constantly during the early or catarrhal stage, over 90 per cent. showing the phenomenon at this time.

4. A lymphocytosis is found usually in those conditions difficult to distinguish from whooping-cough.

5. Therefore, the presence of a lymphocytosis in a child with a hard persistent cough is a factor of great diagnostic value. It is also of prophylactic importance inasmuch as it can be utilised to prevent the spread of the disease by leading to the prompt isolation of the patient.

6. The child's age must be taken into account in estimating the importance of the lymphocyte percentage.

MELENA NEONATORUM.

BLOUNT AND GARDNER (*Am. Jour. of Obstetrics*, Feb., 1906) report a case of melena neonatorum developing four days after birth in a male child weighing 10¼ lbs. Hemorrhage began from the roof of the mouth followed by bloody stools. The hemorrhages from the bowels were repeated every two to six hours for 56 hours. It was estimated that one pint of blood was lost in all.

The treatment first consisted of gelatine solution by mouth, an ounce of a two per cent. solution every two hours. At the same time an ounce was given every four hours by rectum. Later the gelatine by mouth was discontinued on account of its being promptly followed by griping and bloody stools. The gelatine per rectum was continued for 36 hours. Adrenalin solution (1-1,000) M. I. every hour was also given. Morphine was given to control restlessness. On the morning of the third day the breath, bowel movements and gases were very foul, the temperature was 101.6°, the child's condition grave, the stools containing more blood than at any previous time. All former treatment was sus-

pended and the bowel was irrigated every 4 hours with lime-water and salt solution in equal parts, half an ounce of fluid being allowed to remain in the bowel. One ounce of lime-water was given by mouth three times daily. There were no further hemorrhages after this time, the temperature fell to subnormal and recovery was rapid. The birth weight was regained in four weeks.

GLANDULAR FEVER.

VIPOND (*Archives of Pediatrics*, January, 1906) writes of this disease and reports twelve cases from his own practice. He describes the disease as follows:

Glandular fever is a disease which presents distinct signs and symptoms, and, as a rule, is not difficult to diagnose when developed. It is a disease of childhood and is rarely seen after sixteen. Children between four and twelve years are most frequently attacked. It occurs in narrowly limited epidemics, but if one child in a family contracts the disease the rest are liable to be affected. Neuman claims that the disease is most likely due to streptococcus infection, the streptococcus entering by way of the tonsil without producing any local lesion. Dr. Koplik suggests that infection may be by way of the thoracic duct. It attacks both sexes in equal proportions. Most cases are found during the damp, cold months.

The incubation is from five to seven days. The onset is sudden, the child complaining of headache, pains in the limbs, vomiting, pain in abdomen, chills and loss of appetite. The bowels are constipated, but rarely there is diarrhoea. The tongue is coated, the face flushed. The evening temperature is 102° to 104° F., while the morning temperature is about one degree and a half lower; pulse 110 to 130. So far there is nothing characteristic about the symptoms—they may point to influenza, or to one of the acute exanthemata. In twenty-four to forty-eight hours' time the patient complains of stiffness and pain in the neck, the pain being aggravated by movement. On making an examination of the neck we find that the lymph nodes are enlarged, but on inspecting the throat we find it to be quite free from any signs of diphtheria or other inflammatory condition, and at the most some redness of the tonsils is found. In only one of my 12 cases did I detect any sign of pharyngitis; the condition of the lymph nodes is quite characteristic, and when it develops any doubt about the diagnosis is set at rest. Usually the lymph nodes on the left side of the neck are first involved, the nodes at the posterior border of the sternomastoid being first affected. They are hard, intensely tender when handled, and freely movable, about the size of a large bean, and form a regular chain down the neck. Soon the lymph

nodes at the angle of the jaw, and at the anterior border of the sternomastoid become large and tender, and may reach the size of a large marble; when three or four of the nodes in this region are affected, the swelling is considerable. In one or two days' time the right side of the neck becomes implicated, the order of march the reverse of that on the left side. That is, the swelling begins at the angle of the jaw, and at the anterior border of the sternomastoid; later on the lymph nodes at the posterior border of that muscle become inflamed. The patient is fairly comfortable while at rest, but the slightest movement of the head causes severe pain. The parotid glands are not affected, there is no pain on swallowing, but a sensation of tightness is felt in the throat. The skin covering the lymph nodes is in a normal condition.

This disease appears to be a general lymph glandular infection, and rarely do we find the nodes in the neck alone involved. The axillary and inguinal lymph nodes appear to be implicated in most cases. All of my cases presented large nodes in the axillary or inguinal regions, but more frequently in both. The axillary and inguinal lymph nodes were affected in 75 per cent. of Park West's cases. The question arises, Are the mesenteric and the tracheo-bronchial lymph nodes involved? Comby states that it is not demonstrated. Park West claims that the mesenteric nodes were enlarged in 37 of his cases. Several of my patients suffered severe abdominal pain and tenderness on examination, and I have not the least doubt but that the mesenteric lymph nodes are involved in a large number of cases. In not one of my 12 cases did I detect any signs such as paroxysmal cough or difficulty in breathing pointing to the implication of the tracheo-bronchial lymph nodes. Park West found the spleen to be enlarged in 57 of his cases. Seibert reports no enlargement of the spleen, and I might add that I noticed it in only one of my cases. The liver was enlarged in 90 per cent. of the cases reported by Dawson Williams, but there was no enlargement of the liver in any of my patients.

The evening temperature remains high for three to seven days with morning remissions, and frequently ends by crisis with a profuse perspiration. The first sign of improvement noticed is in the fall of temperature, and at the same time the lymph nodes are not so tender, and the neck can be moved without causing great pain, the swelling begins to subside, but this is a slow process, and we cannot generally expect complete resolution until fourteen to twenty-one days, and even after three weeks' time some swelling may still be detected. As soon as the temperature falls the little patient feels and looks better, the appetite returns and convalescence is soon complete. Do the lymph nodes always resolve or does suppuration ever take place? Neumann detected

suppuration in 13 of his cases. Comby states that it is a rare event, and I am inclined to think that it does not take place in typical glandular fever. When suppuration is found we must look for some other local source of infection.

The above description refers to an ordinary sharp attack. Many cases present less acute symptoms. The onset is not so abrupt, the evening temperature being about 101° ; and the disease lasting only two or three days. Resolution is just as prolonged.

The prognosis is good. The complications are not numerous. Epistaxis has been noticed, also nephritis and hematuria.

The treatment is supportive. Locally the author has used with good results iced bichloride compresses. During convalescence tonics are indicated.

ACUTE AFFECTIONS OF THE PHARYNGEAL TONSIL.

DUPUY (*New Orleans Med. and Surg. Journal*, March, 1906) says: While the subject of hypertrophy of the pharyngeal tonsil has been well-nigh exhausted by voluminous contributions, one phase of the question has been completely ignored by the older observers, and is scarcely given its deserved attention by the present-day clinician. We are all familiar with the symptom complex of chronic enlargement of the tonsil, for many of us have come to regard it as a pathological condition originating rather abruptly instead of one resulting from acute inflammatory attacks. It is precisely the acute inflammations of the adenoid which constitute an interesting chapter in the diseases of children.

For practical and clinical guidance the pathology of the pharyngeal tonsil is exactly that of the faucial. The morbid alterations which occur in acute inflammation of the latter, and which can be rightly interpreted even by the medical tyro, are repeated in every particular when the adenoid reacts to microbic invasion. The tendency of infant lymphoid tissue to take on inflammation explains why this tonsil is so frequently attacked. After each attack there results a gradual increase of the glandular and connective tissue elements which leads ultimately to a permanent enlargement. A vicious circle is thus established, as a chronic enlargement of the pharyngeal tonsil again invites recurrent attacks of inflammation. It is now accepted that both in the faucial cavity and in the naso-pharynx the tonsillar inflammation is of infectious origin, the staphylococcus pyogenes being the organism chiefly concerned in the production of these affections. On the other hand, such dietetic influences as arise from the existence of lymphatism and uric acid, etc., must weaken local resistance, acting therefore as contributing factors. Gastro-intestinal disturbances are known to produce congestion of the whole

upper respiratory tract, including the adenoid, which, under such irritation, becomes turgescient and is thus prepared to take on active pathological changes.

The clinical picture is that of a head cold with mouth breathing, free nasal discharge, some fever, extreme restlessness. Examination discloses open and normal nasal cavities. Faucial tonsils not visible. Pharynx healthy-looking; when tongue is depressed, which causes gagging, a large quantity of muco-purulent secretion is squeezed from the naso-pharynx and passes down the pharyngeal wall. Lungs normal, no cough and not the slightest evidence of gastro intestinal trouble. This is one of the common minor ailments of childhood and is wrongly considered a head cold, if by that is meant a rhinitis pure and simple. Primary nasal affections are extremely infrequent at this period.

The clinical picture which I have outlined above offers variations according as the middle ear or the lower respiratory tract becomes involved. The eustachian tube being shorter and wider in the earliest years is an anatomical feature which in itself favors the passage of pathogenic organisms from the post-nasal space into the middle ear. It is therefore quite evident that an inflamed adenoid is a real menace to the ear. Deafness and otalgia occur quite frequently in such a condition. On the subsidence of the acute affection these phenomena disappear. The character of the adenoid inflammation, the virulency of the infection, will determine whether or not the disturbance culminates in an acute supuration. By proper treatment, therefore, of the tonsillar affection we can oftentimes avert the extension of infection to the tympanic cavity and then diminish the possibilities of chronic supurations which are now rightly considered to be the outcome of acute otitis.

In many instances the secondary phenomena appear in the lower respiratory tract, where the effect is manifested either as spasmodic croup or a simple laryngitis, or as an acute bronchitis.

A smaller number of cases do not present symptoms pointing to the naso-pharynx. A septic temperature and general depression, a languid irritable child, and no lung or gastro-intestinal symptoms.

The treatment consists essentially in post-nasal irrigations with alkaline antiseptic solutions. At this early period we are compelled for evident reasons to reach the naso-pharynx by way of the nasal chambers—either a syringe or a good spray being used. I have a preference for the spray. With the child's head inclined forward, the danger of forcing septic material into the middle ear in my experience is very remote. Ichthyol ointment—say from 20 to 30 grs. to the ounce—is prescribed for home use. Its ap-

plication in the nostrils guarantees that it will find its way to the inflamed adenoid.

Argyrol, 10 to 15%, in aqueous solution can be dropped into the anterior nares as the child's head is tilted backward. Its antiseptic and yet non-irritant properties have rendered me good services in post-nasal disinfection.

Appropriate systemic treatment is particularly addressed to any diathetic condition which might exist. Iodide of potash is undoubtedly effective in reducing acute lymphatic enlargements. Remember that the adenoid is a lymphatic. Chloride of potash, internally, watching its action on the kidneys, has its advocates, who declare it a specific. Several experiences have led me to believe that by treating the acute affection of the adenoid we prevent chronic enlargement. This, in itself, is no mean victory for a chronic hypertrophy, passes at once into the field of surgery.

ABSTRACTS.

Treatment of Gonorrhea.

JOSEF RUDNIK, of Vienna, read before the 77th Congress of German Naturalists and Physicians, Sept. 24, 1905, a report of "Studies in the Treatment of Gonorrhea" (*Wiener klin. Rundschau*, No. 40, 1905). He has thoroughly tested arhovin and finds that its chief virtues are that it in no way irritates stomach or kidneys, in absolute contradistinction to the usual remedies. He cites a number of cases in illustration of its action. Many of them were seen again from time to time, examined microscopically, and found definitely cured. He concludes from his experience that arhovin is indicated in all acute and chronic gonorrheal and non-gonorrheal inflammations of the urinary passages in both sexes and all ages.

He gives internally three to six capsules each of four grains arhovin daily. For the urethra he prescribes arhovin bougies and for the vagina he orders arhovin globules. These are far easier to use for the patients than injections. Or 1% to 5% arhovin-oil solutions may be injected.

Used topically, it causes a slight burning in the inflamed mucosa, which is soon followed by an analgesia which makes urination painless. Internally, no ill effect on any organ. The discharge becomes mucoid and ceases, and ammoniacal decomposition of the urine is prevented. In this last condition arhovin is especially indicated. Sometimes the disease is aborted; more generally a rapid and painless cure occurs.

Complications and sequelæ are not entirely obviated by arhovin, but are much less frequent an account of the absence of irri-

tation and rapidity of improvement. Epididymites are very rare; stricture is not occasioned, in fact Goldman has found the remedy of good effect on strictures when present. Cystitis and joint inflammations are rare.

He finds that arhovin has all the merits of the older anti-gonorrhoeics, without their drawbacks.

The remedy has also been favorably reported upon by Profs. Maramaldi, and Mosca, Drs. Piorkowski, Riess, Goldmann, Strauss, Porosz, Meissner, Steiner, Manasse, Reiner, Brings, Weger, Silberstein and others.

Therapeutics of Artificial Serum.

HUBERT RICHARDSON, Baltimore, (*Dietetic and Hygienic Gazette*, February, 1906,) says the blood plasma contains inorganic salts in certain definite proportions, forming a fluid of definite specific gravity adapted for holding in solution the cellular aliments as well as the effete matters of metabolism which are eliminated by the kidneys. A change in the proportion of these salts produces pathologic conditions and interferes with nutrition and elimination, causing starvation or autointoxication.

Arteriosclerosis is due to deposits of calcium and cholesterine in the arterial walls. Trunecek, reasoning that the normal condition of the plasma could be restored by the administration of the inorganic salts in normal proportion, tried this treatment in arteriosclerosis and obtained excellent results therefrom.

When an excess of any substance is eliminated by the kidneys, the elimination of sodium chloride is correspondingly increased. The proportion of the inorganic salts, which is thus disturbed, can be reestablished by the use of these salts. In autointoxication, the result of the non-elimination of toxins produces in the organism, the process of excretion is greatly aided by artificial serum.

In many cases of malnutrition, the chief cause is the decreased power of the various organs to absorb and distribute nutriment, because the plasma is unable to hold the food substances in solution. In mucous gastritis, a pint of distilled water in which four antisclerosin tablets (which consist of the blood salts in the normal proportion) have been dissolved, taken $\frac{1}{2}$ hour before each meal, will answer the same purpose as washing out the stomach. Improvement is generally very rapid; nutrition becomes better, the complexion clears and the patient experiences a gratifying feeling of well-being.

Liver stimulation is resorted to in almost all constitutional diseases, and it is obvious that a solvent for the substances congested in the liver, both as a means of carrying the food products to the organs and as an eliminant to carry off the excess by the

kidneys, is of paramount importance. Artificial serum constitutes the ideal treatment, giving the system an excess of the natural eliminants.

Taken in mineral water, the salts are a most satisfactory adjuvant to other treatment, and in arteriosclerosis I invariably obtained marked improvement or arrest of the disease progress after a few months. Ten antisclerosin tablets are dissolved in a quart of distilled water and taken as a regular beverage. Saline solution has long been used intravenously in Asiatic cholera and other diseases and in loss of blood. But a solution of the inorganic salts in their natural proportion is much preferable; there is probably no toxic dose for it when 3 c.c. per minute are intravenously injected.

In the large majority of cases, however, a high enema of artificial serum gives the same result and is easier to administer. Ten antisclerosin tablets in a pint of water make normal artificial serum. Its rectal injection is especially indicated in heat collapse, weakness from the vomiting of alcoholism and pregnancy, and the like. It acts by raising blood pressure and restores to the blood the volume of fluid lost by hemorrhages or serous effusion, as in diarrhea. It minimizes the danger of post-operative collapse and of shock. In infections and intoxications it aids oxidation and dilution of the toxins, acting as a sort of lavage to the blood; it renews and invigorates the process of phagocytosis which has been impaired by the hypertoxicity of the blood, as has been shown by Sahli. Furthermore, the injection has an undoubted tonic effect upon the nervous system, especially when continued for some time. Among the insane I have had many opportunities of observing the beneficial effect of high rectal enemata of artificial serum. The effects are a more regular heart beat, increased tension, diuresis, increased toxicity of the urine, improved digestion and appetite, and deeper and more regular respiration.

TOPICS OF PUBLIC INTEREST.

Interstate Reciprocity in Medical Licensure

THE exchange of licenses to practise medicine between the states has attracted public interest again, because some of those uninformed by previous discussion of the subject in medical journals and medical licensing boards have dealt with it *de novo*,—as though nothing had ever been said on the question, or as if only sophomores had spoken upon it. New York, in particular, has been criticised because it would not lower its standards, violate its medical laws, and throw open its doors to all who would enter.

These critics would have the Empire State exact less of those from other political divisions who would come within its borders to practise medicine, than from its own citizens, an inconsistency,—yes, even an absurdity,—that is apparent on its face. The principles of reciprocity have been settled long ago and so clearly that he who runs may read. They are, in brief, equality of preliminary requirements, uniformity of collegiate training, and similarity in state examinations. Whenever the medical colleges awoken to the fact that they must agree upon a common minimum standard of entrance requirements of the medical student, as well as a uniformity of methods in training, including length of time required to obtain the doctorate degree, then the examining boards, perforce, will adopt equality of standards and reciprocity will become an established fact. It has been claimed by some who do not quite understand the situation that the state examining boards are responsible in the matter of reciprocity, whereas the medical colleges are the real and most important factor in the case. The boards do not make but merely execute the laws of the states. The medical colleges make their own rules and are responsible for the lack of uniform standards. Is it to be expected that the boards will create a uniformity in finals before the colleges agree upon equality of preliminaries and academic methods?

As a contribution to the general subject, bringing out many facts that have developed in the course of the negotiations between New York and other states looking to the establishment of reciprocity, or in the course of the administration of agreements that have already become operative, the subjoined letter of Dr. Rogers becomes of interest:

STATE OF NEW YORK
EDUCATION DEPARTMENT
ALBANY.

SEPTEMBER 18, 1906.

J. B. GREGG CUSTIS, M.D., PRESIDENT
BOARD OF SUPERVISORS IN MEDICINE AND PHARMACY
WASHINGTON, D. C.

DEAR SIR:

I beg to acknowledge the receipt of your communication of August 29 in regard to reciprocity in medical licensure between New York and the District of Columbia. The facts cited in your letter are matters of record in this Department and I hasten to assure you of our sincere hope that in the near future reciprocity between New York and the District of Columbia may become an established fact. Out of our experience in attaining reciprocity between New York and the states of New Jersey, Michigan and Ohio, we are convinced that a conference of representatives of the

District and State is essential to the perfecting of the details necessary for such reciprocal relations. We will gladly appoint representatives to confer with your representatives in the near future at a time and place convenient to both.

Meanwhile, I invite your consideration of the following facts which have developed in our administration of the reciprocal relations recently entered into between New Jersey, Michigan and Ohio. The details of reciprocity in medical licensure are not clearly understood.

First illustration, New York and Ohio. The clause of the New York statute which permits of reciprocity reads as follows:

“Applicants examined and licensed by other state examining boards registered by the Regents as maintaining standards not lower than those provided by this article . . . may without further examination, on payment of \$10 to the Regents and on submitting such evidence as they may require, receive from them an indorsement of their licenses or diplomas conferring all rights and privileges of a Regents license issued after examination.

The amendment of the Ohio statute which rendered reciprocity with New York possible, reads:

“The Board may in its discretion dispense with an examination in the case of a physician or surgeon duly authorized to practise medicine or surgery in any other state . . . who may desire to change his residence to and practice his profession in Ohio, and who makes application on a form to be prescribed by the Board . . . and presents a certificate or license issued by the medical board of such state . . . accorded only to applicants from states . . . whose laws demand qualifications of equal grade with those required in Ohio, but such examination shall not be dispensed with unless under the law and regulations of the state . . . equal rights and privileges are accorded to physicians and surgeons of Ohio holding the certificate of the Board who may desire to remove to and practice in such state . . .”

It will be noted by reference to the agreement with Ohio that the first article states that the basis on which reciprocity shall obtain between the states of Ohio and New York shall be a license earned on examination in either one of the states. After this agreement had been formally ratified by the signatures of the conferees and the agreement had gone into effect it transpired that the Ohio authorities under the clause “may dispense with” were about to license practitioners in Ohio that had never passed an examination because at the date of their registration in another state the Ohio statute required no examination. It was at once apparent that such action would negative the reciprocal relations, for such standards are lower than those provided by the New York statute which requires examination in all cases.

The basis of agreement provides that before the date it becomes effective the requirements of either state are to be

determined by the requirements at the dates of licensure, but that subsequent to the date of agreement each state must maintain standards not lower than those provided by the statute of the other state.

Second illustration, New York and Michigan. While it appears above that each state must maintain standards not lower than the other, it does not preclude one state exacting higher; for example, the Michigan board wished to maintain a higher general preliminary requirement for admission to the medical schools and the licensing examination, and the applicants for admission to the Michigan licensing examination subsequent to Aug. 1, 1906, must not only present evidence of graduation from a four year high school course subsequent to an eight year preacademic course, but in such high school course he must have pursued certain prescribed studies such as English, mathematics, Latin and science, with the possibility of electing the remaining requirements from other specific subjects. Hence the Board of Supervisors in Medicine and Pharmacy of the District of Columbia can exact higher examination requirements if they deem wise, but whether an examination is lowered by the choice of questions allowed a candidate or improved, is a debatable subject and can very properly be referred to the conference for consideration.

Third illustration, New York and New Jersey. From the experience with New Jersey it is clearly apparent that Notes C and D of the "Law Regulating the Issue of License in the District of Columbia without Examination" can not continue in effect after reciprocity is entered into between New York and the District. For example, assume that reciprocity was entered into between New York and the District on August 1, 1906; that a candidate applying to the District Board is to be considered simply on his own merits; that he presents a copy of the license under which he has practised, shows evidence of moral character and of residence in the jurisdiction which granted his license for at least two years, all over the signature of the president and secretary of the board which granted his license; that he presented no evidence of a general preliminary education prior to his admission to the medical school from which he received his degree. The District Board licenses him on September 1 without examination. Two years later he presents that license to New York State for indorsement, which can not be done under the New York statute. *It was not "issued after examination."*

Suppose another case, however, in which the District Board examined the candidate on Sept. 1, 1906, but did not require evidence of the general preliminary education required by the New York statute. For example, in the fall of 1899 a New York student presents evidence that he had completed two years of high school work; was given credit for the same and told that he must work off two years more of high school work for admission to his first medical year, provided that the medical school might condition him in subjects aggregating not more than one year of high school preparation. That instead of entering the New York medical school in 1901 and graduating therefrom in 1905, he avoids the New York requirement by going to a Maryland medical school, secures his degree in 1903, presents his credentials to the District Board, passes their examination in 1906, and is licensed in October. That two years later he presents said license to New York for endorsement. The New York Board is debarred from licensing him by a provision of the statute which says that "The New York medical schools and the New York medical students shall not be discriminated against by the registration of any medical school out of the state whose minimum graduation standard is less than that fixed by statute for New York medical schools.

He at once enters the courts to compel the indorsement of his license by the New York Board. The court is confronted with this question in logic. (1) The District Board grants to the New York licentiate privileges equivalent to those the applicant seeks. (Note D, District Law). (2) The Regents have registered the District as maintaining standards not lower than those provided by the New York statute. (Agreement). (3) Therefore the New York Board must indorse the applicant's license. (Decision).

This is not a theoretical or an academic question. While New York will gladly enter into reciprocal relations with all states of the Union that will maintain standards not lower than those provided by the New York statute, she should not enter into relations that will involve expensive legal proceedings to weaken the standards that have been attained through many years by wise statute and careful administration—standards that are recognised by the medical profession, medical schools and the educational sentiment of the State as eminently practicable, helpful and uplifting.

Yours very respectfully

(Signed) HOWARD J. ROGERS,
First Assistant Commissioner of Education.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 284 FRANKLIN ST., BUFFALO, N. Y.

VOL. LXII.

OCTOBER, 1906.

No. 3

The Association of Military Surgeons.

THE fifteenth meeting of the Association of Military Surgeons of the United States was held at Buffalo, September 11-14, and was one of the most successful gatherings in the history of the association. The business meetings were held at the headquarters of the Fourth Brigade N. G. N. Y. in the German Insurance Building and were marked by the excellence of the papers presented and the thoroughness of the discussions which followed. Major James Evelyn Pilcher, secretary of the association and editor of the official journal, in preparing the program brought together a series of papers covering a wide range of topics all of which were of special interest to military surgeons.

The first business was the report of the Enno Sander prize medal board of award. The subject was "The Training of the Medical Officer of the State Forces to best Qualify him for Local Service and for Mobilization with National Troops." The successful essay was written by Major Pilcher, an abstract of which will be published in the Journal at an early day. The essay is one of great value and seems to point a way out of the manifold difficulties which at present appear to stand in the way of highly successful service on the part of the national guard medical officers when called for duty with government troops.

The author believes that harmony with the training of the regular military medical officer is the keynote of the successful adaptation of the medical officer of the state forces to the demands of the service, closely followed by the full recognition of military medicine, surgery and hygiene as a distinct professional specialty, requiring thorough qualification in (I) the special professional knowledge included under (1) military medicine, (2) military surgery, (3) military hygiene: (II) medico-military administration, including (1) the selection of men, (2) definite organization of work, (3) the command of men—(a) the hospital corps, (b) the sick—(4) camp location and organization, (5) field hospital

construction and composition, (6) the instruction and drill of the sanitary soldier, (7) "paper work;" (III) the evolution and maintenance of a medico-military esprit de corps, (1) national patriotism and state loyalty, (2) contact with men and literature.

A paper which attracted much attention was that on Tendon tissue versus catgut, read by Dr. Senn, of Chicago. Two papers of superior merit were those by Capt. J. Carlisle De Vries, of Brooklyn, on "Hand and instrument disinfection," and "A sanitary canteen" presented with model of a very serviceable canteen by Dr. Harold D. Corbusier, late U. S. Army.

What undoubtedly was the most important paper of the entire meeting was a preliminary report on uncinariasis in Porto Rico by Capt. Bailey K. Ashford, U. S. Army, read in Capt. Bailey's absence by Capt. P. C. Fauntleroy. The report showed great progress in the investigation of the disease and revealed hitherto unsuspected conditions. The opinions expressed, backed by post mortem evidence and numerous microphotographs of marvellous delicacy in detail, will have a strong bearing on the views to be taken of the condition. When the final report is made it will be the one authority and with the evidence at hand will be conclusive. There will apparently be nothing left for future investigators.

Major L. L. Seaman's paper on "The ration of the soldier" was productive of more discussion than any paper read at the meeting, and the arguments which followed lasted well into an hour, the chief figures in the debate being Dr. Seaman and Col. McPherson of the British army.

The social side of the meeting was brilliantly carried out and it is to the credit of the local committee of which Hon. Herbert P. Bissell was the chairman, that no promise of entertainment was forgot. Dr. Lucien Howe gave a luncheon at his residence at which the Buffalo Academy of Medicine met the officers and foreign delegates and the Buffalo Club gave a brilliant reception to the members of the association. The president, Lieut. Col A. H. Briggs and president-elect Col. Vallery Havard, U. S. A., with representatives of the army, navy and marine hospital service, were entertained at luncheon at the Iroquois by a Buffalo member.

The day following the last business meeting was given up to a trip to Niagara Falls by boat, a gorge ride and luncheon at Niagara Falls.

In the ordinary course of events the presidency for the coming year belonged to the army and would have been filled by Brigadier General Robert M. O'Reilly, surgeon general. Gen. O'Reilly was unable to be present however, and Col. Vallery Havard was

made president in his place. Other officers elected were as follows: First vice-president, Rear Admiral Presley M. Rixey, U. S. N.; second vice-president, Assistant Surgeon General George Tully Vaughan, P. H. & M. H. S.; third vice-president, Col. J. K. Weaver, of Pennsylvania National Guard; secretary, Major James Evelyn Pilcher, U. S. V.; assistant secretary, Capt. J. J. Carlisle DeVries, N. G. N. Y.; treasurer, Maj. Herbert A. Arnold, N. G. Pa.

In his retiring speech, Lieut. Col. A. H. Briggs spoke feelingly of the pleasant relations which had existed during the year he acted as president of the association and bid official farewell to his associates in simple, eloquent words. In assuming the presidency Col. Havard predicted great growth for the association and urged upon the members a continuance of the serious work which has marked the proceedings since its inception.

The only standing committee in which a change is announced is the literary committee, which is made up as follows: Maj. Charles F. Mason, U. S. Army; Surgeon William Braisterd, U. S. N.; Assistant surgeon W. C. Rucker, P. H. & M. H. S.; Capt. Rowe, N. G. Ill.; Dr. N. W. Wilson, late, U. S. Army; Capt. J. Carlisle DeVries, N. G. N. Y.

The next meeting will be held at Norfolk, Va., in October, 1907. The program of the meeting follows:

Further remarks on, and care of gunshot wounds of the abdomen, with special reference to the treatment of such wounds of the urinary bladder. By Former Assistant Surgeon General George Tully Vaughan, P. H. & M. H. S.

Tendon Tissue versus Catgut. By Colonel Nicholas Senn, Illinois N. G.

Hand and Instrument Disinfection. By Captain J. Carlisle DeVries, N. G. N. Y.

Clinical Report of the Use of Yeast in Genito-Urinary Work and Gynecology. By Captain Thomas Page Grant, Kentucky S. G.

Some French Impressions of the Surgery of the Russo-Japanese War. By Captain Charles S. Butler, M. V. M.

A Geometrical Cyrtometer for the Easy Application of Chipault's Method of Cranio-Cerebral Localization. By Surgeon William Hemphill Bell, U. S. Navy.

The Brain a Good Field for Surgery, as Shown by its Disregard for Traumatism. By Captain Charles D. Center, Illinois N. G.

Surgical Treatment of Dysentery. By Surgeon Holcomb C. Curl, U. S. Navy.

Wounds of the Colon Treated without Operation. By Major P. R. Egan, U. S. Army.

The Use of Mercurial Bichloride in Surgery. By acting Assistant Surgeon Montafix W. Houghton, P. H. & M. H. S.

The Classification and Treatment of Burns. By Surgeon Charles P. Kindleberger, U. S. Navy.

Firing Tests and Experiences with the Small Caliber Rifle. By Generalarzt Dr. A. Körting. Translated by Captain William Lassiter, U. S. Army.

A Case of Multiple Gunshot Wound. By Lieutenant Leon T. Le Wald, U. S. Army.

Fractures of the Spine. By Surgeon William P. McIntosh, P. H. & M. H. S.

Surgery at the First Aid Station. By Colonel H. Nimier, French Army.

A Case of Fracture of the Skull. By Captain Samuel M. Waterhouse, U. S. Army.

The Results of a Year's surgical Work in the Old Cavite Hospital. By Passed Assistant Surgeon Ulys. R. Webb, U. S. Navy.

Public Meeting, Y. M. C. A. Auditorium. Reception at Lafayette Hotel.

Defective Vision as a Cause of Rejection for Military Service. By Captain Ernest L. Ruffner, U. S. Army.

Febrile Icterus in Port Townsend. By Surgeon W. G. Stimpson, P. H. & M. H. S.

The Influence of Professor Burggraave upon Modern Therapeutics; with Especial Reference to Military Practice. By Dr. William T. Thackeray, formerly U. S. Army.

Identification by Finger Prints. By Surgeon Charles Poin-dexter Wertebaker, P. H. & M. H. S.

Splenic Abscess as a Not Uncommon Complication of Grave Malarial Infection. By Surgeon William Hemphill Bell, U. S. Navy.

Report of an Epidemic of Cerebro-Spinal Meningitis at the U. S. Naval Training Station, Newport, R. I., with a Discussion of the Disease in Relation to Military Establishments. By Surgeon Norman Jerome Blackwood, U. S. N., Surgeon Middleton Semmes Guest, U. S. N., Passed Assistant Surgeon John Hooe Iden, U. S. N., and Passed Assistant Surgeon John Land Neilson, U. S. N.

Infantile Scorbutus Presenting Pseudo-paralysis as the Predominating Symptom. Report of case occurring in the Philip-pines. By Captain Weston P. Chamberlain, U. S. Army.

A Study of West Indian Bilharziosis. By Passed Assistant Surgeon Richmond Cranston Holcomb, U. S. Navy.

The Opportunities Afforded by the Military Medical Services for Applying Statistical Methods in Therapeutics. By Surgeon (Lieutenant Commander) W. F. Arnold, U. S. Navy, Retired.

Luncheon for the Officers of the Association and the Foreign Delegates at the residence of Dr. C. W. Howe.

The Load of the Foot Soldier. By Colonel Henri Mareschal, French Army.

The Technique of A Yellow Fever Campaign. By Assistant Surgeon William Colby Rucker, P. H. & M. H. S.

Where Treatment of all infected is the Surest Prophylactic Measure—the Problem of Epidemic Uncinariasis in Porto Rico. By Captain Bailey K. Ashford, U. S. Army.

Natural versus Mechanical Ventilation of Hospitals. By Surgeon Preston H. Bailhache, P. H. & M. H. S.

Tuberculosis in the Military Service. By Major George E. Bushnell, U. S. Army.

Notes on Recruiting. By Major Henry I. Raymond, U. S. Army.

The Medical and Sanitary Questions Met in Everyday Life on a Cruising Ship of the Navy. By Medical Director Manly H. Simons, U. S. Navy.

Tropical Hygiene in Reference to Clothing, Houses, Routine and Diet. By Passed Assistant Surgeon Allan Stuart, U. S. Navy.

Report of Two Cases of Apparent Death from Drowning, Showing the Efficiency of Prolonged Artificial Respiration. By Assistant Surgeon John W. Trask, P. H. & M. H. S.

Reception to Officers, Members and Foreign Delegates at the Buffalo Club.

Notes on the Russian Red Cross. By Colonel Vallery Havard, U. S. Army.

The Ration of the Soldier. By Major Louis Livingston Seaman, U. S. V. E.

Recent Observations on Practical Camp Sanitation with Mobilized Troops in Field and Semi-Permanent Camps. By Lieutenant Colonel Louis M. Maus, U. S. Army, and Captain W. J. L. Lyster, U. S. Army.

The work of the Hospital Corps of the Oregon National Guard at the San Francisco Disaster. By Captain William E. Carll, Oregon N. G.

The United States Marine Hospital at San Francisco in the Great Earthquake and Fire of 1906. By Surgeon Henry W. Sawtelle, P. H. & M. H. S.

The Sanitary Department of the Russian Armies in the Far East,—Its Method of Evacuation of the Sick and Wounded. By Colonel John Van Rensselaer Hoff, U. S. Army.

The Military Medical Department in the South West African Uprising of 1904-1905. By Stabsarzt Dr. Kuhn, German Army. Translated by Lieutenant George J. Ogden, U. S. Army.

Experiences with the New York Volunteer Cavalry during the Spanish-American War. By Captain Medwin Leale, N. G. N. Y.

The Work of the Medical Department at Camp Roosevelt. By the Medical Officers on Duty at the Camp of Instruction.

The Workings of the Ancon Hospital, Isthmus of Panama. By Major John L. Phillips, U. S. Army.

The Bravery of the Medical Officer. By Major James Evelyn Pilcher, U. S. V., Captain U. S. Army.

A First Aid Splint Packet. By Surgeon Raymond Spear, U. S. Navy.

Note on the Military Medical Service of the Teutonic Order. By Stabsarzt Dr. Johann Steiner, Austro-Hungarian Service.

The Medical Officer and the Line—A Reminiscence. By Major R. S. Woodson, U. S. Army.

A Sanitary Canteen. By Harold D. Corbusier, late U. S. Army.

Military Medical Chest for use on Mountainous Roads. By Lieutenant Colonel Alejandro Ross, Mexican Army.

A Case for the Chemical Analysis of Water in the Field. By Major Edgar F. Sommer, Indiana N. G.

Equipment of a National Guard Field Hospital. By Lieutenant Colonel Eugene A. Smith, N. G. N. Y.

A Consideration of Recent Views on the Work of the Medical Department in Naval Warfare. By Medical Director John Cropper Wise, U. S. Navy.

Laboratory Work Aboard Ship. By Passed Assistant Surgeon Alfred William Balch, U. S. Navy.

Proposal for a National Medical Service or Department of Public Health. By Surgeon Sheldon Guthrie Evans, U. S. Navy.

A New Field Latrine which fulfills the Requirements for Troops in Active Service where such Device is Necessary. By Captain Frederick C. Herrick, Ohio N. G.

A Description of an Electric Incubator for use aboard Ship. By Passed Assistant Surgeon Richmond C. Holcomb, U. S. Navy.

Steamship and Trolley Excursion down the Niagara River and along its banks.

Luncheon at Niagara Falls tendered by Major M. B. Butler.

American Association of Obstetricians and Gynecologists.

THE nineteenth annual meeting of this association was held at Cincinnati, September 20-22, under the presidency of Dr. John Young Brown, of Saint Louis. The attendance of members and visitors was numerous, the debates were spirited, and the enthusiasm, beginning with the opening session on Thursday morning, never abated until the final adjournment at five o'clock Saturday afternoon. It was the universally expressed opinion that the association never appeared in better form, nor held a better meeting from whatever viewpoint the judgment could be taken.

It is a notable fact that in spite of sweltering atmospheric conditions the debates on this occasion were of an unusually spirited character, the meeting room being crowded to the doors on several occasions. The number of former presidents in attendance was twelve,—a remarkable showing,—the whole number being seventeen. Of these, three are dead,—Rohé, Davis, and Dunning,—one has resigned, one has held office two terms, leaving but one who did not attend. Dr. Vander Veer, of Albany, was detained at home by unavoidable causes but sent his paper with a letter of explanation expressing great regret that he could not be present.

To the president, Dr. John Young Brown, of Saint Louis, no small degree of credit is due for the large attendance, as well as for the admirable manner in which he conducted the meeting. In the latter function he was most ably assisted by the first vice-president, Dr. James N. West, of New York. The committee of arrangements, too, must not be forgotten in our estimate of the causes of success. Led by the chairman, Dr. Charles L. Bonifield, with the secretary, Dr. Magnus A. Tate, a close second, it would be difficult to conceive of a better organised or administered committee than this one at Cincinnati. Every item that could contribute to the completeness of administration or to the convenience of the members was provided, leaving no unprotected points, no neglected details.

In enumerating the several factors which contributed to the success of the meeting, the Hotel Havlin must not be overlooked. This elegant new establishment, under the management of Mr. James T. Clyde, proved admirably adapted to the purposes of such a meeting, and nothing was omitted by Mr. Clyde and his staff that could make for convenience or comfort.

The place of meeting next year was left to the executive council to name. The officers elected were: president, Robert Tuttle Morris, of New York; vice-presidents, George W. Crile, of Cleveland, and Charles Lybrand Bonifield, of Cincinnati; sec-

retary, William Warren Potter, of Buffalo; treasurer, Xavier Oswald Werder, of Pittsburg; executive councillors, Hugo Otto Pantzer, vice L. H. Dunning, deceased,—Rufus Bartlett Hall, to succeed himself, and John Young Brown, vice Morris, elected president.

PERSONAL.

DR. L. S. McMURTRY, of Louisville, and Dr. Charles A. L. Reed, of Cincinnati, paid a visit to Buffalo in August, on their way home after attending the Toronto meeting of the British Medical Association, and were the guests of Dr. William Warren Potter, of Franklin Street. Dr. H. E. Hayd, of 493 Delaware Avenue, entertained at dinner one evening in honor of Dr. McMurtry.

DR. L. G. HANLEY, of Buffalo, surgeon to the Sisters of Charity Hospital, received the degree of doctor of laws at the semicentennial of Niagara University held September 26, 1906 at Niagara Falls.

DR. F. PARK LEWIS, of Buffalo, who was appointed by Governor Higgins sometime ago a member of the commission for the registration of the blind in the state of New York, was elected president of the commission at a preliminary meeting held at New York September 29, 1906. His colleagues are W. J. McClusky, of Syracuse, and E. Morford, of Brooklyn. The organisation was completed by the selection of O. H. Burritt, superintendent of the state school for the blind at Batavia, as secretary.

DR. ALEXANDER HUGH FERGUSON, of Chicago, has been decorated by the King of Portugal with the insignia of the commandership in the Order of Christ, in recognition of his contributions to surgical science and art. This is the highest distinction that the King of Portugal confers upon a foreigner.

DR. NELSON W. WILSON, of Buffalo, associate editor of this JOURNAL, was appointed a member of the Literary Committee of the Association of Military Surgeons of the United States at the recent annual meeting held at Buffalo.

DR. ERNEST WENDE, of Buffalo, who has been enjoying a vacation in the Restigouche region of Canada, has returned and resumed his professional work. Dr. Wendé has been invited to become a collaborator of the American Journal of Dermatology, vice Charles Warren Allen, deceased.

DR. WILLIAM HOUSE, of Portland, Ore., formerly of Buffalo, recently paid a visit to his old home and many friends. Dr. House for some time past has been in medical charge of a large sanitarium for the treatment of mental and nervous diseases at Portland.

SOCIETY MEETINGS.

THE sixth annual conference of the Sanitary Officers of the State of New York will be held at Syracuse October 24-26, 1906. The conference will be addressed by Dr. Eugene H. Porter, State Commissioner of Health, Dr. Samuel Dixon, Commissioner of Health of the State of Pennsylvania, and Col. Charles W. Fuller, chairman of the Sewage Commission of the State of New Jersey. The mayor of Syracuse, Hon. Alan C. Forbes; the president of the chamber of commerce, Hon. Giles H. Stilwell; and the chancellor of Syracuse University, Hon. James R. Day, will deliver addresses of welcome. Eight sessions are scheduled during which papers will be read and discussed relating to public health problems, and exhibitions and demonstrations made concerning sanitary topics.

THE BUFFALO ACADEMY OF MEDICINE held meetings during September as follows:

Section of Medicine.—Tuesday, Sept. 18, 1906, at 8:30 P. M.

Program: (a) Demonstration of Prof. Irving Fisher's apparatus for the mechanic estimation of dietaries, A. L. Benedict. (b) The essential action of some common drugs, Eli H. Long. (c) Cysts of the spinal cord, William C. Krauss.

A Stated Meeting of the Academy was held Tuesday, Sept. 25th, 1906, at 8:30 P. M. Meeting of the council at 8:15 sharp. The program of the evening was furnished by the Section of Obstetrics and Gynecology, as follows: (a) Malpositions of the uterus, John V. Woodruff. (b) Principal cause for abnormal head presentation, Thomas G. Allen. A collation was served at the close of the meeting.

THE MEDICAL ASSOCIATION OF CENTRAL NEW YORK will hold its Thirty-Ninth Annual Meeting at Syracuse, Tuesday, October 16, 1906, under the presidency of Dr. D. M. Totman of that city. The secretary is Dr. C. A. Greenleaf, of Canoga. The program had not been issued when this notice was written.

THE MEDICAL SOCIETY OF THE COUNTY OF ERIE will hold an adjourned meeting at the University Club, Buffalo, Monday evening October 8, 1906, at 8:15 o'clock, "for the purpose of receiving and acting upon the report of the counsel of the society as to whether the recently proposed by-laws conflict with the statutes of the State of New York, and such other matters as may properly come before the meeting." It were well if this society would at once conform to the new order of things resultant from the amalgamation of the two state medical bodies, and their constituent organisations, without further speciousness or quiddity.

COLLEGE AND HOSPITAL NOTES.

THE trustees of the Buffalo General Hospital have purchased a plot of land on Goodrich Street which joins property now owned by the hospital, with the object of ultimately constructing thereon a children's hospital. Dr. D. W. Harrington provided a sum in his will for this purpose, the amount of the bequest not being known at present. It is thought, however, that it will yield between \$75,000 and \$100,000, which will amply provide for the ground and building. The purchase price of the ground just bought was \$8,500, advantage being taken of this favorable opportunity to secure a site for the proposed children's hospital.

THE BUFFALO WOMAN'S HOSPITAL TRAINING SCHOOL FOR NURSES held its commencement exercises and reception at the Chapter House, Monday evening September 17, 1906, at which the following-named nurses were graduated: Elsie M. Carnes, Clara S. Lynn, Ruth G. Hall.

The following program was observed: Prayer, Rev. S. H. Coman; Address, Dr. Ida C. Bender; vocal selection, Mrs. A. H. Prentiss; announcements, Dr. C. C. Frederick; violin solo, Dr. J. A. Ragone; presentation of diplomas, Dr. Earl P. Lothrop. After the exercises were concluded there was dancing.

BOOKS AND AUTHORS.

Christianity and Sex Problems. By Hugh Northcote, M.A. Crown Octavo, 257 pages. F. A. Davis Company, Philadelphia, Pa. (Price \$2.00 net).

This is an alluring mixture of topics and one which needs much careful thought to get at the heart of the subject, for while visible sociologic conditions draw us to the belief that christianity and sex do mix well on the surface, experience tends to lead us

to a more or less unwelcome knowledge that sex can no more be controlled by pure christianity than can disease. There is fascination in this delving into the whys and wherefores of sex problems, and it attracts the religious mind quite as irresistibly as it does the more calculating medical man's attention.

Viewed from a purely christian standpoint and gazed at through the usual long range glasses from the pulpit and handled with gloves as nearly all who are not closely associated with sexual matters handle such questions, pathologic or sentimental, christianity, it must be confessed, does present a purely theoretic solution to all the troubles which beset society. Yet, as a cure-all for sexual problems as is indicated in this book, christianity is a failure and a farce. The great trouble with works dealing with sex from the Bible standpoint; or let us say, from the standpoint of the christian, the man who believes that in christianity alone lies the solution, is that the question is merely skimmed over and there is invariably a daintiness in the handling of the problems which does not carry conviction, and shows a too highly developed sense of maidenly modesty. To adequately present a subject in book form an author must get down to the level of what he is writing about; he must know it, not merely understand it, and to know it he must be familiar with it in all its phases and recognise it from every angle. More, he must associate himself with it and not be merely content to discuss what others have learned.

As a book of reference this one is of value, the foot notes drawing attention to the writings of others and the biblic references to sex being most complete. As a whole the book is a reflection of quite all the serviceable and some of the idiotic writings on this very complex matter of sex. The author's comments on the statements of Ellis, Westermarck and other authorities are interesting, and the fact that he is in accord with the larger part of their teachings gives evidence of the receptivity of his mind and shows him to be anything but narrow or bigoted. The statement credited to Juvenal, however, that immorality in children "is not so much a product of conscious and wilful depravity as of hard and strained conditions of life," can hardly be accepted by those who are at all familiar with sex. study outside the confines of the mission room or the experience meeting. There is conscious depravity in children and it is not due to the hard and strained conditions of life. One must admit this when he hears a group of girls ranging from 11 to 16 brazenly confess their habitual prostitution for money, and glorying in it. There is something more than strained conditions of life to account for it.

In that section devoted to alcoholism and houses of prostitution the author apparently has laid too much reliance on the unsupported statements of the amateur mission workers—people of notoriously narrow mind and broad imaginations. Were it not so amusing it would be pathetic to see set forth in type in a book on sexual matters the statement ascribed to a reformed prosti-

tute, that "nearly every man" entering one of these lidded palaces of pleasure was intoxicated, the inference being that he knew not what he did or where he went. Yet, that is merely an allusion and not an opening for a discussion of the "social evil" as we are happy to term prostitution when we discuss it among our church societies, and when we write horror-stricken and foolish letters to the newspapers. In this he is wise. But, when the statement is made that 14% of boys have varicocele which has been "contracted" there is reason for much wonder, and again the struggle between the ludicrous and the pathetic is presented. Like nearly all works which endeavor to set up christianity as the one hope of a sin-besodden world, there is too much sentiment and too little sense; too much trimmings and not enough substance; too many illustrations which are patently exaggerated, not by the author necessarily, but by those from whom he has received the facts in his investigations. Here, for instance is the tale of a boy, a nice clean, gentlemanly boy with high ideals and pure mind, who was just as nice a boy as a boy could very well be and still remain human. One day in school he saw another boy flogged—and then he went to a brothel. And the horrible example is closed by the author with this thrilling statement: "The moral rot which wrought such disaster to a once promising career set in as the direct result of the ill-omened contact with prostitution." Sad, isn't it?

In the handling of masturbation it does not seem possible, that the writer can be sincere in his concurrence with the views of some of the top-heavy maiden lady writers on boyhood and sex whom he quotes, for it is recommended to mothers that they can cure the habit by praying for their son's welfare and strength, and that a most excellent procedure is to sit by the bedside when the child has fallen asleep, take his hand in theirs and make low-voiced suggestion that the habit is to be broken. One might imagine that this suggestion came from the eminent Mary Baker instead of a woman whose weight of ideas might fit her for a place among the bassos in a choir.

Briefly, there are many excellent thoughts in the book. The author has gone into the subject very thoroughly and his list of references is invaluable. Yet, it must be confessed that in addition to all the good in the book there is an unmistakable flavor of cant; but one must expect that in any work which, while recognising sex and sex problems, throws about them the banner of the church and declares in substance that the narrow aisle approaching the altar is the only road to solution and salvation. It's fine in theory, but it doesn't work out in practical experience.

Christianity does much to prepare the world for the battle with the problems—it can do much more. But it will never become a uniformly successful therapeutic measure. It's field is rather prophylactic than otherwise and it has got to be dealt out with judicious hands.

State Commission in Lunacy for the State of New York. Sixteenth Annual Report, October 1, 1903 to September 30, 1904. Transmitted to the Legislature February 8, 1905. From Hon. Henry W. Hill, Senator 47th District. Albany: Bradow Printing Company. 1905.

The annual reports of this commission contain interesting facts relating to the insane in this state. During the period covered by this report the cost of maintenance was \$5,161,198.06, the total number of patients treated being 26,861. The average number under daily care was 24,647.

Included in the report is a detailed statement as to expenses in each hospital and an elaborate statement by the pathologist. Tribute is paid to Dr. Peterson who resigned May 14, 1904, and general medical affairs of the hospital receive appropriate attention. The book contains many statistical tables, and other items of interest to the political economist who gives attention to the insane.

A Treatise on Surgery. By **George Ryerson Fowler**, M.D., Examiner in Surgery, Board of Medical Examiners of the Regents of the University of the State of New York; Emeritus Professor of Surgery in the New York Polyclinic, etc. Two imperial octavos of 725 pages each, with 888 text illustrations and 4 colored plates, all original. Vol. II. Philadelphia and London: W. B. Saunders Company, 1906. (Per set: cloth, \$15.00, net; half-morocco, \$17.00, net).

The second volume of this comprehensive treatise fully sustains the opinion expressed by the journal in commenting upon the first—namely, that Fowler's surgery is the most substantial contribution to the textbook literature of the subject in recent years. It represents the patient study of a practical and resourceful surgeon during twelve years of mature life, when his activities and judgment were at their best. It is the crowning effort of a ripened manhood that was always reaching out for something better—and obtained it.

This volume continues the topic of regional surgery beginning with that of the dorsal and lumbar vertebræ, then taking up in regular order, surgery of the abdominal and pelvic regions; surgery of the female pelvic organs; surgery of the upper extremity; and surgery of the lower extremity.

As might be anticipated with reason, appendicitis receives considerable attention, it being the subject of a special treatise or monograph written by Fowler five or six years ago. It was, alas! the very irony of fate that he should succumb to the disease in the treatment of which he was an expert, and upon the entire details of which he was an acknowledged authority. Hernia is another topic that is elaborately discussed and much light is thrown upon this always attractive subject. The kidneys form another interesting field for this author, who presents many suggestions of value in regard to it.

Fowler was an ingenious surgeon who offered many new points in technic for the consideration of his colleagues. Among

these may be mentioned Fowler's position, (the reversed Trendelenberg); Fowler's incision in appendicitis; Fowler's infolding intestinal suture; Fowler's method of colopexy in prolapse of the rectum; Fowler's operation for hemorrhoids; Fowler's operation for prolapse of the rectum; Fowler's operation for retrodeviation of the uterus; Fowler's operation for syndactylism, and Fowler's universal needle forceps.

The treatise is profusely illustrated with original figures and drawings in the text and four colored plates. It is a distinct addition to the surgical literature of the period and is unsurpassed by any work that has yet appeared, whether desired by the specially trained surgeon or the general practitioner.

BOOKS RECEIVED.

A Manual of Chemistry, General, Medical, and Pharmaceutical, including the Chemistry of the U. S. Pharmacopeia. By John Attfield, F.R.S., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain, 1862-96. Edited by Leonard Dobbin, Ph.D., Lecturer on Chemistry in the University of Edinburgh. Nineteenth Edition. 12 mo, pp. 776. Philadelphia and New York: Lea Brothers & Co. 1906. (Price, \$2.50).

A Manual of Otology by Gorham Bacon, A.B., M.D., Professor of Otology in the College of Physicians and Surgeons, New York. With an Introductory Chapter by Clarence John Blake, M.D., Professor of Otology in Harvard University. Fourth Edition. 12 mo., pp. 485. With 134 Illustrations and 11 Plates. New York and Philadelphia: Lea Brothers & Co. 1906. (Price, \$2.25).

Progressive Medicine, Vol. VIII, No. 3, September, 1906. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 298 pages, 13 illustrations. Lea Brothers & Co., Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00; carriage paid to any address).

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol VI. General Medicine. Edited by Frank Billings, M.D., and J. H. Salisbury, M.D. Chicago: The Year Book Publishers. 1906. (Price: \$1.25; entire series, \$10.00).

American Practice of Surgery. A Complete System of the Science and Art of Surgery by Representative surgeons of the United States and Canada. Edited by Joseph D. Bryant, M.D., and Albert H. Buck, M.D., New York. Complete in eight volumes. Vol. 1. Imperial octavo, pp. 818, with 294 illustrations in the text. New York: William Wood and Company. 1906.

A Textbook of Physiology. By Dr. Robert Tigerstedt, professor of physiology in the University of Helsingfors, Finland. Translated from the third German edition and edited by John R. Murlin,

A.M., Ph.D., Assistant Professor of Physiology in the University and Bellevue Hospital Medical College, New York. With an introduction in English by Professor Graham Lusk Ph.D., F.R.S. (Edin.). Octavo, pp. 751. New York: D. Appleton and Company. 1906. (Price: Cloth, \$4.00).

Transactions of the Southern Surgical and Gynecological Association. Vol. XVIII. Eighteenth Session, held at Louisville, Ky., December 12-14, 1905. Octavo, pp. 456. Edited by William D. Haggard, M.D., Secretary. Philadelphia: William A. Dornan. 1906.

The Practical Medicine Series of Year Books. Ten Volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. V, series of 1906. Obstetrics. Edited by Joseph B. De Lee, A.M., M.D., with the collaboration of D. Roehler, M.D., and Herbert M. Stowe, M.D. Chicago: The Year Book Publishers. 1906. (Price: \$1.25; entire series, \$10.00).

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. IV, series of 1906. Gynecology. Edited by Emilius C. Dudley, A.M., M.D., and C. von Bachellé, M.S., M.D. Chicago: The Year Book Publishers. (Price: \$1.50; entire series, \$10.00)

LITERARY NOTES.

THE INTERNATIONAL JOURNAL OF THERAPY has lately presented its appearance in the journalistic field. It is well edited and its make-up is attractive. It is limited to the topic of therapeutics as indicated by its title. It is edited by Dr. Otto Juettner, of Cincinnati. The subscription price is one dollar a year.

THE INTERNATIONAL MEDICAL REVIEW, to be published in Berlin and edited by Dr. Hugo Neuman, is announced to appear at an early day. It will be printed in English, German, French, Italian, Spanish, and Portuguese, while a Russian edition is projected. It is intended to be a journal for medical practitioners, hence the important questions of therapy and diagnosis will receive greatest prominence. The first number will be looked forward to with great interest, and we bespeak for this new enterprise the success which the magnitude of the undertaking so well deserves.

MISCELLANY.

DR. WALTER D. GREENE, Health Commissioner of Buffalo, has issued the following circulars:

No. I.

On or about October 1st, 1906, there will be added to the work in the laboratory of this department, the examination for the gonococcus in cases of Ophthalmia Neonatorum.

An outfit, called the "Ophthalmia Outfit," consisting of two glass slides, two sterilised wire loops, together with the necessary directions and blanks of record in a mailing envelope, has been devised, and physicians may obtain the same, free of expense, by sending to the office of the Department of Health.

Directions for taking the specimens (which are enclosed with each outfit) must be carefully followed to insure reliable results. After an outfit is used it must be returned to the Department of Health by mail. Examinations will be made and reports sent as soon as possible after receipt of a used outfit.

DEPARTMENT OF HEALTH,
September 25, 1906.

No. II.

I beg to call attention to Section 13 of Chapter XXV of the city ordinances, which reads as follows:

"It shall be the duty of any physician, immediately upon the first visit to report to the health department all cases of infectious or contagious diseases."

There seems to be an impression that tuberculosis is not included in the list of cases to be reported. We find a great disproportion between the number of deaths from tuberculosis and the number of cases reported, and by comparing the death certificates with the reports, we see who has failed in this respect.

The Buffalo Academy of Medicine recently adopted a resolution sustaining this ordinance and calling for its enforcement.

I, therefore, request every physician to kindly do his part and *promptly* report all cases coming under observation.

The penalty for a violation of this ordinance is the same as that for all others in this chapter.

DEPARTMENT OF HEALTH,
September 1, 1906.

RHUS TOXICODENDRON POISONING.—Dr. E. S. McKee, Cincinnati, (*Journal Am. M. A.* Jan. 27, 1906) found the remedy par excellence to be a saturated solution of the lead acetate in the dilute alcohol of the U. S. P. The full strength of the alcohol burns too much. Persons exposed should wash their hands immediately in the dilute alcohol, the only way to thoroughly remove the poison, which according to the investigations of Pfaff (*Journal of Experimental Medicine*, Vol. ii, No. 2) is an alcohol soluble fat resembling croton oil.

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

NOVEMBER, 1906.

No. 4

ORIGINAL COMMUNICATIONS.

STUDENT IDEALS.¹

By JAMES E. KING, M. D., Buffalo, N. Y.

Adjunct Professor of Obstetrics, University of Buffalo, Attending Gynecologist, Buffalo General and Erie Co. Hospital; Fellow British Gynecological Society.

I have always considered the one selected to give the opening lecture of the year, in the medical department of our University, as a particularly favored person. It is the only time that a member of the Faculty has the opportunity to meet members of the four classes, and is at the same time permitted to choose his own subject for discourse. I find myself in that enviable position tonight and I want to take the occasion to welcome you all back, to say what I can to you of encouragement, and above all to give you some good advice. It is human nature for all and a second nature for physicians to tell others what they ought to do. In those of our profession, therefore, there may be found an excuse for this weakness and behind that excuse I shall take refuge, if you consider that I am taking too great an advantage of you at this time.

We begin tonight the sixty-first year of our medical department. Sixty years of honorable record, during which time our university has sent out its share of medical men until now they may be found in almost every state of the union. Early in our history as well as in the history of all medical schools, it was an easy matter, comparatively, to obtain the degree which you now all are seeking. Two years of four to six months each was all that was required. A common school education was all that was necessary as preliminary and this enabled many a farmer to step out of his overalls into the profession of medicine. No doubt in this way many a good farmer was lost to the world in the making of a poor doctor. It is yearly becoming more difficult to enter upon the study of medicine. The preliminary requirements are continually being raised, the study course is from time to time

1. Opening lecture of the Sixty-first Annual Course at the University of Buffalo, delivered September 24, 1906.

lengthened and made more thorough, and it is a very safe prediction, that you will live to see the time when five years will be the shortest period in which the degree of doctor of medicine may be obtained. I say this for the consolation of the freshmen who may be here tonight, and who may perhaps consider that four years is a long, long time. Each year as it passes, however, will seem shorter than the preceding, until at last those four years will really have slipped by very quickly and you will be revered by the then freshmen as I suppose you reverence the seniors now.

I think that the freshmen should have all the encouragement and kind words that we can spare. Such words of encouragement must come from the faculty, for the kind words that the freshmen receive from the other classes, especially the sophomores, will never spoil them. There are three occasions in the life of every freshman which I am sure way down deep in his heart he dreads. They are his first official meeting with the sophomores, his first operation, and his first visit to the dissecting room. I have never quite understood why the duty and pleasure of welcoming the freshman class always fell upon the sophomores. They have always seemed, however, to have accepted the trust with pleasure and enthusiasm and to have discharged their duties with neatness and dispatch. The only explanation that I could ever give is that the sophomores being the last class to be welcomed, there remains fresh in their memories the details of their own experience during those interesting ceremonies, and this stimulates their inventive genius and causes them to enter into the spirit of the occasion with great zest. As to his first operation, there is always a question in his mind as to just how much of that operation he will see. On that occasion he is usually found in close juxtaposition to the emergency exit. Should he withstand the ordeal, however, he leaves the clinic with his chest a few inches higher, a thorough conviction of the nobleness of medicine in general and of surgery in particular, and a firm mental resolve that he himself will one day be a surgeon. If, on the other hand, he should be seized during the operation with a sudden and uncontrollable desire to lie down, surgery then does not possess for him the interest it ought, and after he has been propped up in his seat and the great beads of cold sweat stand out on his brow and trickle down his neck, he wonders if he has made a mistake in thinking that he is really needed in the ranks of the medical profession. This experience rarely happens the second time and in a few weeks our freshman is found in the front rows, absorbing with interest the details of the various operations.

The dissecting room, too, at first has for him a certain horrible charm. This feeling is, perhaps, encouraged by the attitude of the laity in general and the members of his family in

particular. A medical student is supposed generally to revel in horrible things. He is viewed with suspicion abroad as well as at home, and all mysterious packages that he may carry or bring home are supposed to contain fragmentary portions of "the human form divine." The dissecting rooms today do not possess the many unpleasant features of years ago. The dissections were then done at night, which, of course, added much to the unpleasantness of the duty. The work, too, was conducted with much less thoroughness and system than at present. In my students days we were required to do a certain amount of dissection in a certain specified length of time. The record of time and work was kept in the dissecting room in a large book, in which we were required to register, indicating the time of our arrival and upon leaving the time of our departure, together with the particular amount of work done for the evening. This constituted the only official record of time spent in the dissecting room, and this rather loose system made it possible for those disposed to make false entries of time and work.

I am glad to say, however, that there were but few students who took advantage of this opportunity to be unfair. I remember on one occasion, however, one of the students came early to the dissecting room one winter's evening, being on his way to the theater. He came to register his name and so get credit for time not actually spent in the room. He was dressed in his best and it was rather exasperating for us, in our aprons, to see him standing about in his finery, smoking a cigarette while we were doing honest work. We all cheered up presently, however, when we saw one of the students surreptitiously slip into his overcoat pocket three long cold fingers, in an excellent state of preservation and whose days of usefulness were over. Our wildest hope was that later, perhaps, he would put his hand into his pocket and receive a mild shock and perhaps even a twinge of conscience at the reminder of his having falsely and dishonestly registered. What actually did happen we learned the following morning. It appears that our friend and his young lady reached the theater without mishap and he placed his overcoat in a vacant seat next his girl. During an affecting scene in the first act, the young lady requested the opera glasses and he whispered back that they were in his overcoat and that if she would feel in his pocket she would find them. She evidently did find something, for he said that the celerity with which that young woman's hand was withdrawn from that pocket was little short of marvelous. With a look of horror on her face she asked him how he could play such a mean trick on her. He, of course, was ignorant as to why he should have taken this sudden fall into disfavor, and by way of explanation he reached over into his pocket and brought to the

surface the three fingers. The young lady promptly became hysterical and insisted on being taken home at once. The following evening he was seen going about the dissecting room with the three digital relics in an endeavor, with the instincts of a true Sherlock Holmes, to match them with a view to discovering the perpetrator of the trick. His efforts were, of course, without success. "Dead men tell no tales."

I think that it would be very interesting if a perfectly candid expression of opinion could be obtained from each student as to why he was prompted to adopt medicine as his profession. For yourself and your future it is very important that you know your true motive. Were you to so honestly analyse your motives I think they would be found to be among the following reasons: First, perhaps, you thought that the pecuniary reward from the practice of medicine will be great. If such is the case you are probably doomed to disappointment. Men actuated by this motive compose a large percentage of those who either give up the profession entirely, or who leave legitimate medicine for the ways of the charlatan. Again, you may have thought that the profession of medicine assured you a more honorable standing in your community than other pursuits, but I can assure you that in this democratic country of ours it is useless for you to depend upon your title of doctor alone to do you honor. It is only by your own worth as men and women and by your deeds as physicians that you may expect the title of doctor to bring you honor and standing among men. On the contrary, it has become a constant strife to raise and protect our profession from the hands of those who have the same degree as we, but who practice all kinds of irregular methods calculated to cure the sick.

Possibly, too, some one may have turned to medicine for the same reason that a rather discouraged father gave, when he explained that as his son had failed in everything else he had to make a doctor of him. Perhaps that was possible years ago, but medicine today is not the dumping ground for miserable failures. For a young man today to successfully terminate his studies in medicine, he must have that same ability and that same tenacity of purpose that is so necessary not only for the student but for the practitioner of medicine. Today, if the faculty find that a student exhibits a lukewarmness or inaptitude for his work he is courteously recommended to discontinue the study of medicine. Should he not act upon this suggestion, the faculty may at their discretion refuse further matriculation, or the sifting process of the examinations may leave him high and dry. The public is thus saved from the young man and, what is still more important, the young man is saved from himself.

Such methods, however, are very rarely necessary, as the large majority of our students are men and women of earnest purpose and ability. Now, if the foregoing be all wrong as to motives for your adopting the study of medicine, what then should be the true reason for your undertaking the work? It should be primarily your love for science in general and your desire for medicine in particular. With this should be coupled a thorough realization of the arduous duties and the grave responsibilities that will be yours in your life of administering to the sick; with this high incentive and, of course, the requisite ability you may confidently expect success,—success not only in your college work but in your later professional career.

Success, though, is a relative term. Each of us has his own conception of what the word comprehends, depending upon his own individual ideas. But success in your college work must mean to you all one thing at least,—namely, that you pass the examinations. This, however, is the very lowest possible standard that you can have for your student work. Success to you as students should mean something very much more. It should mean that when you leave this college you should possess a training that will enable you to successfully cope with medical problems unhinted at in your student days; it should mean a training that will stimulate you to seek and possibly find new paths in your profession; it should mean that training which broadens your horizon to things other than those in the science of medicine itself; and, finally, it should mean a training that will inspire and prompt the best and the noblest that is in you, not only in your profession but in your lives as men. If at the termination of your studies you can claim these, then indeed have you attained success.

After you have entered the practice of your profession your individual ideas of success will vary within very wide limits. To one it may mean simply the acquiring of a snug bank account; to another it may mean a modest country practice; to still another it may mean high standing in the ranks of your profession; and so each will have his own notion of what spells success, and toward that ideal it is to be hoped that he will strive. It is not my purpose, therefore, to attempt to define for you what success in your professional life means, for it would be my idea of success and perhaps not yours at all, but I think that I may be permitted to make a few suggestions which, if followed, will tend to lead to success in your student work, as well as to success in your professional life, no matter what your idea of success may be.

I like to compare these opening lectures with the ceremonies and first shovelful of earth that inaugurates the beginning of work upon a great public building. Tonight we start the work for you and tomorrow you are to take up your pick and shovel and are

to labor for four long years, in the construction of a foundation upon which in later years you are to erect a building as beautiful and large as you will. Much, or perhaps all, depends upon the foundation you fabricate. It must be such that you go on and on with a structure that should never be completed; for the moment you cease building, that moment your building becomes old and decay sets in. It is not, however, of this building that I wish to speak, for we feel sure that if your foundation is right the building will take care of itself. If your four years of apprenticeship have been properly employed here, you will emerge as master workmen, prepared and anxious to go on. And so now as students we want you to thus realise that you are here not so much for the purpose of studying to learn medicine, but rather learning to study medicine. Keep clearly this thought before your mind; its truth you will better realise when you have left this institution.

Now then, what is necessary that you may properly construct this foundation which is to be the base of your work in later years? Your professors and instructors, will supply abundant material, much more I fear than you will ever use; but just here remember that good work depends not so much upon the amount of material you use, but upon how well you use it. Each stone should be carefully fitted in its relations to those about it. Loose material lying about is of little value. No matter how good in itself a stone may be, it is of no true service to you until you have made it a part of the whole. In this same way, in your college work never allow a fact to remain loose and unattached. As such it can be of no real value. Find some other fact which depends upon it or some fact upon which it depends, cement these together with your best reasoning, and then it is fixed and becomes yours forever.

If I were asked for the one thing that will contribute to the best training in your student work, I should unhesitatingly reply, "the exercise and development of your faculties in reasoning from the cause to the effect in medicine."—the "why and what of it" in medicine, if you like. It is to the development of this that your professors and instructors try to lead you and it is to this end that you yourselves must strive. Be not satisfied with an isolated fact or statement, but fit it to some other by the answer to one or both questions, "why and what of it?" The cultivation of this habit will make you masters of what you learn and you will be thus able to draw upon your knowledge to good purpose, in the solution of those everyday problems that will confront you in your professional life. Some one has said that as important as having knowledge is the knowing how to use it, and this habit of correlating one subject with another will help to fix all, make them

equally useful and train you to use them to the best advantage. This spirit of inquiry developed during your work here will prompt you to investigation and research, to solve questions in medicine as yet unanswered, and thus perhaps you will bring fame to yourself and inestimable good to others.

Next in importance to the proper use of material comes the enthusiasm with which you work. In building this foundation we want no union men. Yours is not to be simply an eight hour day but it may be a ten or twelve. Your zeal for work, however, will not be wanting if your motive in studying medicine has been the proper one. Perhaps you remember Richard Carston in Dickens's "Bleak House," who, after trying several different professions and occupations and giving them all up from lack of interest and intensity of purpose, was finally sent to a kind surgeon, who undertook to instruct him in his profession. This, too, poor Richard in a short time gave up, and upon his friend's enquiring of the surgeon's wife as to the cause of the failure, she replied that it was a favorite saying of the captain who was the predecessor of the surgeon in the love of the good woman, "that when you make pitch hot, you cannot make it too hot, and if it is only a plank you have to swab, swab it as if Davy Jones were after you," and she concluded by remarking that she thought this applied to medicine as well as to other pursuits.

There are very few of us who can work with enthusiasm along lines that do not appeal to us and arouse our interest. If we are not interested in the work we have in hand it is a difficult matter to keep our "pitch hot." Some very fortunate ones are able to put their best efforts in whatever work they do, regardless of whether it appeals to their interest or not. These are men who attain success in whatever they undertake, whether profession or business. It is a rare attribute and a valuable one for its possessor. The opposite of these is typified in Richard Carston, to whom nothing appealed. Men of such stamp drift along aimlessly through life, never attaining success nor leaving the imprint of their personality upon what they do. Most of us, however, belong to that great majority who require the stimulus and prompting of congenial work. Our work must possess for us a continual unabated interest in order that we may do the best that is in us. And this, then, is an important reason for you to scrutinise carefully tonight your motives in studying this profession, and should you even later find that medicine does not meet your requirements, by all means abandon it for pursuits more adapted to your capabilities and tastes, and in which you will be able to do greater justice to yourself, as well as be of greater use to your fellow men.

Thus far my remarks have been in your interests only, but I do not want the opportunity to pass without saying a word in

behalf of your instructors. Bear in mind that you teachers have always your welfare and advancement at heart. You can show your appreciation by giving your attention, for an instructor is always grateful for the interest you manifest in his subject. Over the piano in a western dance hall was displayed a sign reading, "Please don't shoot the band; he is doing his best." I have sometimes thought that a sign in your recitation room asking you not to discourage your teacher, as he is doing his best, might not be out of place. It is very discouraging for the instructor to teach and to supply the enthusiasm that the student should bring with him. An attempt at answer will always be appreciated for it indicates a desire on your part to try at least. And remember in this connection, that your reputation as students is built not upon what you know but upon what we find out you know.

Just here let me say that it is unfortunate that we must depend to such a great extent upon the examination as a criterion of your knowledge. Theoretically, the examination is right; practically, it is wrong. It is wrong because the student makes the examination his goal, and the moment he does he loses sight of that true significance of his medical training which I have tried to impress upon you tonight. Just so long as the student regards the examination in this light, just so long will he appear at the time of the examination haggard and worn, the result of an attempt to crowd the subject matter of a year into the space of a few hours. And if on the night of the examination he were given his choice between a mark of eighty and a high ideal, he would naturally select the mark. We set a premium on the mark and not on the ideal. To attain that mark he has crowded into a tired brain a jumbled mass of facts of absolutely no use to him, except for the purposes of the examination and then they are as promptly forgotten. The result is that in these cases we turn out a well crammed graduate and not a thinker.

Look at the question as we will we can not get away from the fact that we as your teachers are primarily responsible for this state of affairs. But the examination with all its evils must stand for the present, until some better standard may be had to indicate your fitness for advancement. Until that time shall come we both must recognise its evil influence, and you as students and we as teachers, must work together for the accomplishment of that broader significance of medical training. Efforts in that direction have been made by teachers of medicine all over the world, and the recitation, the conference, and the more general bedside teaching are steps in the right direction. Your parts as students will come when you better realise the importance of doing your work each day so that it will play its part in shaping your char-

acter and adding permanent knowledge to your store, so that you may truly say,

"Each day is your life,

"And your life but a day repeated."

And now in closing I am conscious that I have not been able to give you anything that is either scholarly or scientific. But I shall be content if I have succeeded in implanting one thought that will help you to broaden your scope and view of your work with use; one thought that will help you to realise the importance of your work here as not meaning simply the obtaining of a degree, but the acquiring of a training that will develop in each of you a scholar. And so when you shall have received from our hand the highest honor which lies in our power to bestow, we shall not feel that you are "well crammed graduates," but well rounded scholars of medicine.

With this hope goes my God speed and the assurance that the entire faculty is with you in your work, with desire to assist you in developing that student ideal, which will make men and women of worth, physicians of attainment, each a credit to this University.

1248 MAIN STREET.

The Enno Sander Prize Essay, 1906.

The Training of the Medical Officer of the State Forces to Best Qualify Him for Local Service and for Mobilization with National Troops.

BY MAJOR JAMES EVELYN PILCHER, U. S. Army.

Secretary of the Association of Military Surgeons of the United States and Editor of the
Journal of the Association of Military Surgeons of the United States.

(Author's Abstract.)

THE early days of every war, requiring the aggregation of large bodies of men, have been fraught with disease and disaster to the troops which have been gathered. The impression has prevailed that any man can become a soldier after a few days instruction. The result of this notion has been in the highest degree disastrous to the nations where the idea existed. France, Germany and England have alike suffered from this cause. In the last two wars in which the United States has been involved the condition has been particularly conspicuous. Much criticism was turned upon General McClellan because of his failure to move out upon the enemy in the Civil War, but McClellan recognized the fact that an army cannot be made in a day, and an inefficient instrument, no matter what its size, may be brought to wreck by

its premature application. The success which crowned the arms of the North in that bloody conflict came only after an army had been created by long experience and active operations.

In the Spanish-American war the conditions might have been more advantageous had the state forces, of which the troops were largely composed, been uniformly trained, so as to combine easily and readily into a national army. It is not within the limits of this essay to specify the needs of a volunteer army nor to criticise or comment upon the errors of other days, but it is hoped that it may open up a discussion which may result, in case of future hostilities, in a nearer approach to harmony among the units of which our forces are composed than has hitherto existed.

The subject of the training of the medical officer of the state forces to best qualify him for local service and for mobilization with national troops is a topic, the importance of which in a nation like the United States of America, cannot be overestimated. Relying as we do upon the state troops as a supplement to the small national army supported by the country, it is essential that the organization of both bodies be so harmonized that service together may occur without the slightest friction or difficulty. This end is sought by the use, in both bodies, of the same drill books, so that in matters of drill, these two branches of the military service would seem to be practically uniform. In other respects, however, this would not naturally occur, as, in the absence of definite instructions, individuality is sure to have its influence.

The writer was greatly impressed by this fact when at the opening of the Spanish-American War he was detached from the regular service and assigned to duty with a volunteer force, which afterward formed the basis of a corps of the volunteer army and itself became a division. The medical conditions which prevailed upon his arrival at the volunteer command were what might have been expected. There were a sufficient number of devoted and successful medical men. Some of the regiments had a hospital organization: some had tents fitted up for hospital purposes; some had a definite sick call; all had hospital stewards, and some had a nominal hospital corps detachment. There was, however, no general hospital organization, and no hospital corps detachment aside from the privates-detailed from the line in some of the regiments. There was little if any attempt to properly record the case histories of the sick men, and the duty and authority of the medical man in the supervision of the sanitation of the camp was not understood. The idea of property responsibility was wholly absent and the duty of the medical officer to the government as a protector from future improper claims for pension was not appreciated.

Early efforts were made to render the service uniform. Not much time was given to directing the professional care of the sick, since it was believed that the medical officers were all well qualified physicians and entirely competent to direct the treatment of the sick of their organizations. But the teaching inaugurated was directed especially to those features in which the medical officers were particularly deficient.

To this fact is due perhaps the criticism made in a recent medical journal by a distinguished physician, who was surgeon of one of the regiments,—that the main object of the administrative medical officer during his service appeared to be the development of records and papers, he apparently not appreciating the fact that his medical qualifications were not considered to demand instruction.

It must be admitted, however, that at the time of the outbreak of the Spanish-American War definite plans for the expansion of the Medical Department had not been made. Many of the medical officers of the regular service had given much thought to the subject and a number of them had written to a greater or less extent upon the topic. Definite arrangements, however, for expansion appear to have been entirely lacking and each regimental, division, and corps surgeon was allowed to pursue his own sweet way. The result was a confusion and a lack of uniformity which was pronounced in the extreme.

As the officer detailed by the Chief Surgeon of General Shafter's force of the regular army at Tampa to inspect the sanitary features of the organization composing it, the writer examined most of the hospitals comprising its medical department and found no two alike. Most of them were admirable, all of them were ably organized, but there was entire lack of that uniformity which would render consolidation readily and easily accomplished. This was due to the fact that in 1898 there was no definite regimental, brigade, or division hospital organization prescribed in the American service.

It will be seen then from these observations that at the opening of the Spanish-American War there were factors involving both the regular service and the volunteer forces which rendered consolidation and mobilization impossible without material changes in both. That they ultimately came together after a not inconsiderable amount of friction, by which the irregularities were rubbed off and a certain amount of dove-tailing was allowable is due to the high character of the men comprising the personnel rather than to the conditions existing in either branch.

The lesson to be derived from this experience is that in order to admit of prompt assimilation the militia must be trained along lines uniform with those of the national service.

The position of a National Guard medical officer is fraught with responsibility and cannot be taken too seriously. The National Guard is a military body with service extending not only in the temporary summer encampments but throughout the entire year and with duties of the highest importance. It is much more than an opportunity to wear gold lace in winter and go on a week's picnic in summer. It is preparation for grim war which may come at any moment, as well to the peaceful guardsman as to the professional regular. So long as a man connects himself with the citizen soldiery, so long he carries the burden of an obligation to prepare himself for the best possible performance of the duties which he is or may be called upon to perform. He must not feel that with a uniform, his pocket medicine and instrument cases, and a saddle equipment for his horse, he has fitted himself for the work of the military surgeon.

THE SPECIALTY OF MILITARY MEDICINE.

Military medicine and surgery is a specialty, not difficult of acquisition, it is true, but nevertheless a specialty, proper familiarity with which is essential to the adequate performance of the medical attendance upon a body of military men, be it a separate company, a battalion, a regiment, a brigade, a division or a corps.

To qualify in the specialty of military medicine and surgery, the newly appointed medical officer must become familiar,—in addition to the features of ordinary civilian practice,—with,

I. The special professional knowledge included under—

1. Military medicine.
2. Military surgery.
3. Military hygiene.

II. Medico-military administration, including—

1. The selection of men.
2. Definite organisation of work.
3. The command of men.
 - (a) The Hospital Corps.
 - (b) The sick.
4. Camp location and organisation.
5. Field hospital construction and composition.
6. The instruction and drill of the sanitary soldier.
7. "Paper work."

III. The evolution and maintenance of a medico-military esprit de corps.

1. National patriotism and state loyalty.
2. Contact with men and literature.

It is evident that the work of the military medical officer is of three kinds, medical, military, and patriotic.

I. THE SPECIAL PROFESSIONAL KNOWLEDGE.

The medical work naturally falls into two classes, therapeutic and prophylactic.

Therapeutics.—The therapeutic work of the military medical officer differs but little from that of the civilian practitioner in its simpler forms, and any practitioner who has mastered the curriculum of one of the numerous high grade medical schools, which are so abundant in the United States, should be competent to conduct this phase of military medical work without especial instruction.

A military dispensary, however, must necessarily be mobile and consequently exclude elaborate preparations and confine itself to one of several agents, each of which may accomplish the same purpose. It will not be practicable for the military medical officer to carry with him in the field any large supply of the elegant pharmaceutical preparations which may be so useful in the permanent stations or in civilian work. The necessities of field work are of two kinds:

1. Portability of supplies.
2. Adaptability of the supply table.

To these may be added a third feature, represented in the person of the medical officer himself,—

3. The ability to utilise the therapeutic means afforded him.

It is not necessary to go into detail upon these points, but the ability to utilise military medical supplies is of much importance. In National Guard work, where an encampment is for but a short period, it will be possible as well for medical officers to take with them any additional agents which their own methods of practice cause them to feel to be needed. This plan, however, is to be discouraged because it violates the chief object of the annual encampment, which is to afford to the men, unobstructed by their ordinary avocations, the opportunities of military experience in a condition as nearly approaching actual service as may be. While the private soldier and the officer of the line are as far as possible adapting themselves to the military rules and regulations of the nation, it is desirable that the medical officer should not render himself conspicuous by departing from them. Strictly speaking then, he should take with him to camp nothing but the remedies designated by the nation for his work. He should make a careful study of the agents afforded in the field supply table, one of his chief occupations during the period of encampment, and if possible he should have taken up the subject carefully beforehand. He should be prepared to use the medicine furnished, as substitutes for other similar ones which he may have been accustomed to employ in his general practice. The

writer realises how essential this is, from his experience with volunteer medical officers during the Spanish War, where many of them were greatly embarrassed by the lack of the good old standbys, which they had been administering in their civil practice but which were not available in the Army supply table, although agents equally efficient and effective were there offered in abundance.

Military Medicine.—Typhoid fever, general infectious diseases, diseases of the gastro-intestinal tract, diseases of dissipation and heat exhaustion are worth especial consideration. Although military medicine resembles civil practice in so many respects that, aside from the features of prophylaxis which will come under consideration in connection with military hygiene, but little need be said at this point.

Military Surgery.—In connection with military surgery especial attention should be given to the first aid dressing and to the various pouches and cases which are furnished the medical officer, in order that they may be readily utilised.

Prophylaxis.—Even more important than therapeutics is prophylaxis, a feature of medical work which has but little vogue in civil life, but which is of vital importance in army service. Here lies perhaps the most difficult duty of the National Guard surgeon. Accustomed in the work of civil life to wait for an invitation before extending the healing hand; wont to be bound down by the ethical requirement of not seeking or soliciting practice, it goes vastly against the grain of the civilian practitioner, recently or temporarily injected into military life, to publicly foist his sanitary opinions unasked or undesired upon his comrades or superiors.

But the conditions of military service, where large aggregations of men are accumulated with reciprocal action upon one another, are fraught with a myriad opportunities of infection and innumerable possibilities of disease. A single bit of neglect will open the door for a thousand misfortunes. With tuberculosis, typhoid, dysentery, typhus, smallpox, measles, mumps, yellow fever, malaria, tetanus, and a host of other affections crowding the sanitary picket line in search of an opening for their destructive action, it well behooves the medical man to be constantly on guard, and to continually keep before the service the dangers which he sees and, possibly, alone appreciates. The most important study then of the physician to whom the duties of military service may come is military hygiene and sanitation. This is almost of paramount importance and over and above everything else.

The food and water, the wastes and excreta, sanitary inspection and first aid, are all important topics to be taken up.

II. MEDICO-MILITARY ADMINISTRATION.

The military portion of the work of the medical officer of the state forces is more of a novelty to the newly commissioned surgeon than the professional work of the specialty. He should remember that he is now a military man and should not fail to qualify himself to properly fill the new position. He should become familiar with his military duties, should learn his proper position in military maneuvers, should familiarise himself with the methods of handling the arms which he is entitled to carry, and should be in all respects a soldier as well as a doctor. The duties of a military character which are peculiar to him however, are themselves important and should be considered with the greatest care.

The examination of recruits, the definite organisation of work, with careful attention to its details, the recognition and appreciation of property accountability, are all matters which must be cultivated by the militia surgeon. He must learn to command men, not only those of his Hospital Corps, but the sick. The title of "Doc" or "Doctor" must be absolutely rejected, and he and his men must learn that the military salute and proper deference to rank is an essential feature of military service. In no place is his work more important than in connection with camp location and organisation, and in no place is there more need for insistence upon his rights and duties.

The proper organisation of the sanitary service is a matter of the highest importance to him. In some states such organisations are already in existence and need but a little improvement to bring them to the line of highest efficiency. In others organisation is defective or wanting and the medical officers, having learned what is necessary and desirable, should proceed to the correction of the defects and the filling of the vacua.

Paper work is a subject upon which a great deal of emphasis must be laid, experience having shown it perhaps to be the weakest feature of the medical officer's work. The value of records to a medical officer can be appreciated now by many who did not comprehend their use at the time, because of the numerous applications for pension which have been made by the sick who were under their charge. Among hundreds, and in some instances, thousands of cases which were treated in regimental and division hospitals, the recollection of a single instance is impossible without records, unless there should have been some exceedingly unusual or conspicuous incident to impress it upon the memory. The correct record not only protects the government from the assaults of unworthy claimants upon its treasury, but it assists in the obtaining of relief to worthy men who have suf-

ferred disabilities through military service. The proper keeping of the records then is a duty, not only to the government, which the medical officer has sworn to maintain and abide by, but an equal duty to the comrades who may have been entrusted to his care by friends at home or by the kindly concern of a generous nation.

Paper work then is of an importance of the first class and second only to therapeusis and prophylaxis. No National Guard medical officer should fail to make a thorough study of the various blanks and forms used for hospital purposes. Many of the states employ blanks of their own devising. The writer can hardly see the need, or even desirability, of such a condition. There are of course a number of blanks prescribed for use by the national service, with which the state troops must be fused in case of general hostilities, some of which are necessary in the national guard service, but those papers which are needed should be identified with those of the national government in order that the fusion, when it comes, may be attended with as little friction as possible. It is hardly possible that perfection should attend any piece of work, and so it can hardly be asserted that the forms and papers of the Army are perfect. Were such the case the changes which not infrequently occur would not be made. But the fact stands, nevertheless, that these are the forms and records which must be used when troops are mustered into the national service and with all their weaknesses and deficiencies, it is probable that, having been devised by men of long experience in military affairs, they approximate very closely to the necessities of the service.

It is especially advised then that the state forces abandon the use of special forms for these records and utilise those of the national government. Were this done, and were the medical officers appreciative of the necessities of the case fully familiar with them, the need of especial instruction in public work upon the part of medical inspectors would be absent, and it would be practicable to devote far more time to professional work proper.

III. THE EVOLUTION AND MAINTENANCE OF A MEDICO-MILITARY ESPRIT DE CORPS.

Enthusiasm is the mother of efficiency. The man who has the greatest interest in his work is the man who accomplishes the most for his cause. Those troops which are animated by the highest degree of patriotism are those which perform the greatest feats of arms. There are few officers of the military services, whether state or national, who are not animated by sincere patriotism. Second to this comes loyalty to one's state. Happily in this day national patriotism is recognised everywhere as para-

mount to state loyalty. Every medical officer should, nevertheless, be imbued with the deepest affection for the state which he is commissioned to serve, and should therefore be the more ready to disdain no labor nor exertion, physical or mental, which would add to his efficiency as one of its defenders. The observance of the points which have been all too inadequately presented in this paper is essential. The carrying out of the plan indicated will take time and some labor, but the result in efficiency and in loyalty will be beyond calculation.

No method of increasing one's efficiency and enthusiasm is greater than that of contact and attrition with men who are interested along similar lines. This has been recognised in some of our states by the organisation of medical officers' schools and medical officers' associations. The school for medical officers, maintained by the Volunteer Militia of Massachusetts, is of the highest value to that excellent service, while the Association of Military Surgeons of the State of Illinois cannot be underrated as a contributor to the efficiency of that superb medical corps. Organisations of this kind, whether schools or associations,—they mean the same whatever their name,—are of the highest value to the medical officer, and where they exist no man should fail to connect himself with them and participate actively in their work. Where they do not exist, efforts should not be lacking to bring them into existence.

But whatever the state relations may be along these lines, no medical officer should fail to avail himself of the incalculable advantage to be derived from membership in the Association of Military Surgeons of the United States. This organisation indeed began as an organisation of the medical officers of the National Guard, and its work has developed along lines of the highest character until it is now the greatest military medical association in the world. The opportunities of developing esprit de corps afforded by its meetings are inestimable. No man can mingle with the enthusiastic and interested participants in its conventions without developing added enthusiasm in his work. The monthly Journal, which reaches every member, whether he is or ever has been able to attend the meetings or not, brings regularly its cargo of information, original and selected, to the members of the Association. The prizes offered for the discussion of important military medical subjects have resulted in the production of numerous brochures of the greatest value to the profession. The activities of the Association have been mighty in gaining recognition for military medicine, and so long as this organisation lasts, military medicine cannot recur to the conditions which existed before its formation. It is then not only a privilege but a duty for every medical officer of the National

Guard, as well as for those of the national services, to identify himself with military medical progress and take interest in the great Association of Military Surgeons, which will reward his interest a thousand times by the encouragement, advantages and growth which it will contribute to his professional career.

CONCLUSION.

In the preparation of this essay many points of an apparently elementary character have been brought out, mainly matters with which the Army medical officer becomes familiar by association with the service, but which the National Guard officer cannot learn from that source. Many military features, however, it has been impossible to bring out because of the limits of space, although it is realised that they are extremely essential. The writer was astonished during the Spanish-American War, when seated upon a hotel porch, by the side of the Corps commander, to see a volunteer Colonel pass in the street and salute the commanding General by holding his forage cap in the right hand, over his left shoulder, a little point which military experience upon the part of the Colonel, would have shown to be entirely incorrect, but which was not corrected by the commander because it was, as a matter of fact, a genuine evidence of the Colonel's desire to extend the highest military courtesy. There is no available book upon military etiquette or medico-military etiquette, a matter which the writer much regretted upon his own entrance into the service. For this reason he has admitted to this paper a number of points which might have been excluded were he writing for officers who have had regular army experience, or had there been an available textbook to which he might have referred the medical officer of the state forces for information.

To sum up the whole subject we may conclude then, as the consequence of our consideration of the training of the medical officer of the state forces, that to best qualify him for local service and for mobilisation with national troops,—

1. There is need of special study upon the part of the medical officers of the National Guard and state troops to fit themselves for work in their own forces, not only in local service, but in connection with the national services in time of war and in peaceful mobilisation.
2. The most essential feature in the effort to secure harmonious action with other state troops and with the national forces is uniformity of training, particularly along the lines of medico-military administration.
3. The most important element of the medical officer's training is confessedly the highest grade of efficiency in military hygiene, medicine and surgery. But of great importance and over-

lapping these to a considerable degree, is a familiarity with medico-military administration, without which, indeed, the proper practice of military medicine, surgery and hygiene will be impossible. The medical officer must become deeply acquainted with the proper methods of selecting recruits, he must be able to control his men, commanding the respect, not only of the Hospital Corps, but of the sick under his direction; he must be an authority beyond dispute upon camp location and organisation; he must understand the principles and practice of field hospital construction and composition; he must have experience in the instruction and drill of the sanitary soldiers; and he must be prepared to protect his service and assist his comrades by a thorough acquaintance with the records of his department.

4. To crown all these and to add to his efficiency in every respect, there must have developed in him an enthusiasm based upon loyalty to the nation and interest in his profession, which shall impel him at all times to labor unceasingly and incessantly for the good of the service which has honored him with its commission.

By pursuing then the lines of work and of thought, which have been altogether too inadequately suggested, the medical officer of the National Guard of the United States will find his department *semper paratus* for all the emergencies of peace within the limits of the commonwealth which he is serving, and ever ready, in case the dark clouds of national or international conflict should overshadow the horizon of the nation's glory, to at once unite and coalesce with the forces which the mother country has maintained as a nucleus about which all military operations shall center.

CARLISLE, PA.

The "End of the Season" Illness:

Its Sometime Cause and a Case.

By WOODBRIDGE HALL BIRCHMORE, M. D., Brooklyn, N. Y.

AS a consequence of one of the constantly recurring contradictions of all the seeming probabilities of life, "The wise summer maiden, and her wiser yet mamma," who have run every sort of risk during the vacation season, appearing practically immunised to all forms of contagion, are singularly prone to fall ill immediately after they shall have returned to their homes, from the various "places of refuge" at the seaside and among the mountains. Their splendid health during the season has passed into a proverb; and not infrequently we hear words spoken, with intention far from kind, setting forth the excellent health of the invalid away from home. This proposition, that persons who

are known by their friends as never well when at home appear always in the best of health, both in body and mind, when absent from its petty cares, is so often demonstrated, that the phrase, "I am as well as an invalid away from home," has passed into a proverb, used by would-be wits to express the very extremity of light heartedness and the most heedless possible enjoyment of the hour.

But it really appears to me that the most interesting part of the picture is passed unnoticed by part of those who one would suppose should see all the details, and those who are in a way conscious of the facts, while appreciating that the conduct of these people is certainly a menace to their health, and the consequences of this misconduct are a mystery, accept the whole strange group of facts as part of life's unexplained phenomena, as if it were not the duty of all interested in the public health to understand the mystery and countervail the menace.

There is also a group who are conscious of both the mystery and the menace, as is shown by the comments which they make from time to time, but while they declare that "Science" should have probed the menace and have shown its power for mischief great or small, and have made the mystery to be easily understood, they are content to see the mystery and the menace remain mystery and menace still.

At every summer watering place we meet these mysterious cases and day after day physicians spend hours in the company of these people who are "Invalids,—Devils at home,—but Angels when away." We find women fair and ever fairer, young and ever younger, and we wonder at the rashness displayed by all of them in every form of pleasure. They appear to defy every rule of right living, to ignore every caution the physicians may have given them, to commit excesses in the plain defiance of all the teachings of sense and reason, and yet seem to go unwhipped of that justice which is a Nemesis for their brothers. Away from home, at the seaside or among the hills, in the cool grotto of some nymph's retreat or wandering along the shimmering sands, these fair matrons and winsome maids are insensible to fear; for them sickness has no threatening hand. Death quite forgotten shows no threatening visage. They live, they seem to love, the Sun shines bright, they have eyes only for the things which Pleasure brings them, they hear the whispering winds and babbling brooks, and laugh in unison with the laughter of the Sea.

The daughter of Tethys and Chronos, the ever-virgin Goddess, the laughter-loving maid, sees them, she nods and smiles and promises to them an eternity of life and love, but as ever promises, false hearted that she is, only to deceive. Matrons forget their vows and maidens vow but falsely, and intoxicated by the en-

vironment, which they imagine that of "Freedom," they remember only that they are women, while they see in their companions only *Man* in all his multitudes of forms, but *never men*. Mentally and morally they find enjoyment without limit, and they take whatever gifts the gods provide for them, and very wise they ask no questions, "for when ignorance brings bliss 'tis but folly to be wise."

Yet this enchanting period ends, and the rush and hurry of the automobile, conveying those whose bank account will grant this mode of travel, or the plebeian express train hurries the wanderers homeward. They arrive,—and then? To the thoughtful physician who has for weeks been in the very middle of this strange and mysterious enchantment, this mystery of madness, the utter disregard of health, causes much uneasiness. He knows that at least seven out of every ten women have for days been living on their reserved strength, and he knows that reaction will set in the instant the strain is relaxed by the very least possible portion of the load, and he dreads lest an explosion be the next act in the drama.

Those who will be his patients begin presently to fall ill, and he who saw the beginning sees now the end of this mad campaign of pleasure. Ignoring enteric fever, and all the other forms of disease which can be diagnosticated as the work of individual mischief makers, the physician, who has been at the rendezvous of the pleasure seekers, at the corner in hill country, or at the seaside, where Dives and his wife and daughter have courted Hedone's good graces so recklessly, waits patiently for manifestations of the consequences of the midsummer-madness, and presently his patience is rewarded. He sees that Nemesis, as always, has walked unseen in her sister's shadow and that she exacts her penalty to the very last sigh, to the last fraction of a tear.

These women who returned in such splendid health, in such mad good spirits, are presently taken sick; no sooner have they returned, no sooner have they taken up the daily round of their duties and of their domestic lives, than something goes wrong and instantly they are invalids, not by the choice of any, and least of all by their own, but by compulsion. This illness is not the recoil from moral, mental and physical strain, as some have inferred, as has been said by many and taught by not a few, who are or were accounted great clinicians, and so accounted justly, nor is it an attack of "invalidism." On the contrary, in most cases the illness takes the form of a comparatively well known symptom picture, as a catalogued disease. At other times the effect produced is "malaise" only, or that state which a few years ago was everywhere and still is in some places held to be sufficiently described by the epithet, "an attack of malaria."

In considering the distressing condition, demanding our immediate aid, it is important to remember that certain real diseases, which are the result of well known causes, must be eliminated at once, as has already been referred to, such for example as the very common but protean "enteric fever," which is now well known to cause much more than half of that illness of the Autumn season for which we can account. This elimination is the more needful because but very little of the illness of this season is fully understood, and a great part of the printed traditions aids us not in the least degree by giving to us the much needed light; indeed, it rather hinders us by darkening counsels, and the verbal discussion which goes on around and about us appears to be little if at all more profitable, to wisdom of action or by advice.

One of the most interesting of these "end of the season" disorders is frequently mistaken for a condition so much more serious that the diagnostic blunder always causes extreme surprise, when the facts are all distinctly seen. Not that the condition in actual being is not sufficiently serious to demand the utmost care from the physician whose duty it may chance to be to care for the unfortunate; it is, but the commonly made diagnostic blunder is prone to cause a condition quite as serious as the real pathological condition; and when, as so often, all too often, happens, the original illness and the diagnostic blunder are both a burden thrown upon the mentality of the patient, it is no wonder that the mental burden becomes truly excessive.

The disorder begins to show its hydraheads almost at once, usually within a week or ten days of the return home. The patient, who to the very hour of return was active, full of laughter and joy, to all who come in contact with her appearing to be the very incarnation of high spirit, becomes listless, irritable, weary at trifles; and sometimes is given to outbursts of apparently inexplicable grief and causeless crying, and even at times to such passionate manifestations of emotion, at once ill defined and unexplained, as apparently to justify the suspicion of mental unsteadiness; and this suspected unsteadiness almost of a certainty appears prominently among the possible explanations which will presently be sought for with more eagerness than judgment, and with much more pertinacity than wisdom. A few such cases have been recorded during the past three years, principally in the French journals, which, if not embellished by the skilled imaginations of the story-tellers, certainly justify the conclusion that the most daring imagination approaches to facts only distantly.

It is said that a famous writer of fiction, having introduced a scene into the best known of his stories which turned on one of these causeless outbursts, a physician was so unwise as to say that this was "a very curious instance of the ignorance of

laymen on matters connected with medicine." Thereupon the novelist referred him to the very page in a well known medical publication which contained the very same description, given as being an account of an actual happening. The writer also has been the witness of one of these outbursts of causeless, or apparently causeless, grief; and the utter tragedy of thought, word and gesture will never be forgotten. The real difficulty will always be to determine how much is due to "nervous storm" and how much to the occasion which has chanced to cause or call forth the terrifying outburst.

In some of these cases, which afford symptoms suggesting troubles much worse than "serious," the unfortunate victim has been put in condition of restraint, and the actual facts have not been discovered until the mischief, done to the personality by this precaution, has been carried beyond any possibility of repair. Thus, in too large a group of cases, young women have been "put under observation" and have thus been indelibly stigmatised because the family physician first, and the consultant misled by him afterward, accepted as true a statement neither should have accepted without personal verification, and thus both failed, as they should not have done, in making a diagnosis at sight. More than one case of this kind has passed within my experience and the cases are not unique, nor even particularly uncommon, and at least two great specialists, one in England and one in the United States, have declared that the mistake is disgracefully frequent. The family physician is called in, maybe in the very midst of an impassioned outbreak, and a dreadful tale is told to him, and he, already impressed by the nervous unsteadiness of his victim and the condition of persistent mental excitement, asks for the privilege of consultation. It is of course granted and he, already convinced as to the facts, seeks the advice of a physician who is a specialist in nervous diseases.

The special practice of the consultant is concealed from the young woman by her parents, or those who act in their stead, but somehow the patient is informed of it, by her maid, usually, who imagines that by telling her mistress of the fact, which has been unwisely concealed by the physician, she is protecting her mistress from some plot against her peace. The fact of the concealment is thus brought to the notice of the victim, this unfortunate young woman, in such a way as to impress upon her already excited mind that those about her have become doubtful of her sanity, and that they believe that she is no longer sane. The suspicion reacts upon the imagination of the victimised young woman, and fear is added to the existing causes of excitement and mental perturbation, while the physical condition which underlies

the apparent causes of disturbance gives ground for a very real despondency.

As might have been foreseen, when the famous specialist is introduced to the young woman she presents every symptom of the suspected disorder of mind and yet not in such way as to convince the specialist beyond all hesitation. Yet the almost criminal, but worse than crime, for 'tis a blunder, mistake is made and the unfortunate victim is "placed under observation."

Thus is one more victim made, the unfortunate young woman, is thus put under observation at the dictum of a man who has no real and legal right thus to pronounce sentence upon her, and yet he is wholly immune in respect to all responsibility for his act by reason of the way in which this act is done. The unfortunate is under observation, her doom is sealed; never in her life can this young woman be the same as other young women, she has been marked, one might say branded, as one of those unfortunates whose perfect sanity has been called in question; from this time onward for all her life she will be exposed to innuendo and suspicion, the innuendo and suspicion of her dearest friends, who will never hesitate to say, "Mollie is a delightful young lady, but very unfortunate. Do you know? No, well, she overdid one summer and it was necessary to send her to a sanitarium for observation." Naturally a sensitive young woman does not enjoy references so cruelly made, and she withdraws as much as possible from those who persistently disregard her feelings and almost intentionally cause her pain. Reaction naturally comes in time, but having learned the delights of solitude, she more and more inclines to enjoy its dangerous pleasures. Cut off from the companionship of those of her own age, partly by the acts of others and partly by her own, this unfortunate young woman is before long reduced to a selfish and largely fictitious valetudinarianism. She is not really ill and she knows it, but, as she finds the affectation of ill health less tedious than explanations, especially as the explanations do not explain, she accepts the situation passively. Gradually she yields more and more to the seductions of this life, until the affectation of valetudinarianism by necessity becomes her dominant idea, she believes that she is an invalid and magnifying every trifling pain into an agony, every insignificant headache into a menace to her sanity, even to her life, until the integrity of her sense of distinction and proportion is lost and she is reduced to *quasi* imbecility.

All of this miserable history is the direct result of the mistake in diagnosis, a mistake which should have been practically impossible, and a mistake which would have been easily avoided, both by the physician and the consultant, but for the physician's

initial blunder in mistaking the accidental and secondary for the primary symptoms, the transient for the constant, the superficial for the fundamental. Had the family physician in seeking the solution of his problem, the establishment of his diagnosis, sufficiently difficult at best, without the added handicap of an expert opinion, much misled and more misleading, (that of the mother, sisters, friends, all ready to aid if possible, but with an opinion already formed to urge them to give special color to the atmosphere, and, having deceived themselves, to warp the physician's judgment also), the nervous system's disorder might have been assigned to its right place in the catalogue of symptoms, instead of being mistaken, so needlessly, for the phenomenon which should dominate the whole diagnostic field. In fact all that the mental group of the nervous system's manifestations really amounted to is simply an exhibit of certain interesting instabilities, an accidental detail—nothing more.

It is even possible that had the family physician asked, "What is the condition of the urine?" and followed up his question he would have saved the case. But it is quite certain that if he asked this question he did not follow up the inquiry as he should have done. It is even possible that a sample of the urine was sent to some laboratory for examination, yet were this done it is hardly likely that the chemist's report would aid much in clearing the diagnosis, because it would probably, almost certainly in fact, fail to mention—as probably the physician chemist made no note of it—the only fact of real importance to the diagnosis as to which the examination of the urine could afford any information, namely, the rapid oxidation of the pigment of the urine, by which the color is changed from a clear transparent yellow with a greenish opalescence to a dark, or even very dark, muddy brown. This simple fact, the change produced by the action of the air upon the pigmentary contents, would (or should) have given the physicians connected with the case a suspicion easily verified as to the possible causes of at least some of the phenomena observed,—the probable cause of most of them and the presumptive cause of all. In a word, had the physician carefully considered the facts in the way suggested, he could not but have noted that the urine contained the bile pigments in great quantity, which would at once have accounted to him for all the most prominent symptoms, which, obviously, after the observed discovery of the bile pigment in quantity, are simply phenomena to be expected, and present, proclaim the diagnosis in the tones of Stentor.

Bilious intoxication is not so unusual as to cause any special alarm to the experienced physician, and that bilious intoxication is the condition which he has to deal with the experienced prac-

itioner will plainly recognise when once the facts in relation to the urine pigment are made plain. But it must be remembered that it is only by some accident, or the physician's thoughtfulness, that these facts can be learned in houses provided with those various appliances for personal comfort and cleanliness, which were luxuries among even the well placed two generations since, but which are regular necessities of life today.

Having determined the fact of the biliary poisoning, the next problem is the reason of it, why it is and wherefore, and it is by no means always an easy thing to establish the answers to these questions, for the patient will almost to a certainty insist that the bowels are fully emptied every day. However this may be, an examination of the abdomen by palpation will demonstrate that the large intestine contains much refuse, which should be removed at once, using such speed as may seem to the physician to be possible, or wise.

The half, or even the quarter, of a century since, this condition, if the physician was so fortunate as to recognise the significance of the symptoms, would have been looked upon, and rightly too, as a subject for much thought and consideration, but today, thanks to the extended studies of Bouchard and those who, inspired by the wonderful results which he obtained, followed his steps and then outstripped him, this question in therapeutics is much simplified, and even in some ways reduced to a matter of routine. The attending physician who has been sufficiently acute to establish the diagnosis, we may be assured is sufficiently informed as to the therapeutic possibilities to meet the indications of the condition which he has surprised. Naturally, adopting modern ideas, means and methods, he acts at once and without hesitation. To relieve at once the condition which displeases him he empties the bowel speedily, cleanses it effectually, disinfects it carefully, and having thus removed the cause which originated the threatened danger, he guards against the possibility of its renewal. Guided by a well systematised opinion, his experience directs what to do, he hastens slowly, acts rapidly, succeeds at once. Only two questions demand anxious thought. "Shall I empty the gut by a single operation or by degrees?" and "has this constipation continued so long as to render the over distension of the rectum with hard masses possible?"

Forty years ago, or even twenty-five, the physician would probably have made use of drugs tending to excite violent peristalsis even if he had also used a saline; and these drugs by causing such peristalsis would also cause a discharge of serum into the lumen of the gut, thus developing a seromucus lubricating fluid, which, to quiet an objecting intelligence, he assured himself

was also depurative, although being intelligent he doubted it. Today the physician gives the saline and he gives it alone, and in giving it he seeks the solution of therapeutic problems which his father understood but dimly, and of whose existence his grandfather did not even dream. Among salines, he has much liberty of choice, and therefore the duty of selection; this his grandfather had not at all and his father only in small measure, while today the physician has the full duty of determining "which one?" among at least a dozen, and must give a reason for his decision to a presumably rather exacting scientific conscience. His grandfather knew only the neutral sulphate and the neutral and acid tartrates, and he knew of no reason for a selection among them except his own personal taste and choice. His father's list contained, in addition to these, the effervescing mixture of the acid tartrate of potash with the neutral, or better the acid, carbonate of an alkali, and this was widely used by all.

But the physician today has a wider choice and a greater responsibility for he has to consider two distinct types of saline, the still and the effervescing salines, and in this second type list are two distinct kinds which may properly enough be called two species, the rapidly effervescing and the slowly effervescing salines, neutral salines, that is. In those of the first type the carbondioxide causing the compound to foam is given off so rapidly that practically none of its gaseous contents can reach the stomach, and surely little of it can by any chance extend its beneficent influence beyond the pylorus. Not so the others, disengaging the carbondioxide gas but slowly; a very large fraction of this component is liberated in the small intestine to become useful in a way frequently not thought of at all, and very seldom considered with that seriousness which is the due of so useful, and it may be even powerful, an agent, powerful as measured in the effects produced in comparison with the reaction of the system, which reaction is far less than the observing physician might expect.

When the solution of crystalloid salts reaches the obstructing mass in the lumen of the intestine it can go no farther, and it reaches this position in from three to five minutes after it is taken into the stomach, commonly sweeping through this viscus as if the small intestine were not dilated at this point. Thus, the water ingested washes out and carries before it all and singular everything it has met with in the upper or small intestine.

On its way from the pylorus to the ileocecal valve the saline solution has been steadily disengaging carbondioxide, until the bulk of the intestine has become twice or even thrice the bulk of the ingested fluid, and in this journey the water has been in advance of the gaseous portion taking up the various mucoid and

albuminous elements until its fluidity is much reduced, sometimes to an index as small as N|3. . In passing into the ascending colon the water goes first, but in the ascending colon positions change and the gas coming to the top forms an elastic cushion partly or wholly gaseous, partly water mixed, suds like in condition, containing vast numbers of small bubbles, which mixture of gas and water makes its way into the various material substances which as a mass plugs the intestine, and it does this much more rapidly than water alone, or water mixed with mucus but without the gaseous content possibly could do it. The water under the action of the peristalsis presses upon the gaseous layer crowding this into the interstices of the refuse contained in the gut, breaks this up and gives opportunity for the water to enter the crevices, and in this way the water and gas together rapidly disintegrate that which would long have resisted the action of water alone. At the same time the fecal masses and water are rapidly churned into a practically homogeneous fluid by the action of the peristalsis in the ascending and the transverse colon. In the descending colon the action of the water in disintegrating the contents is less rapid until the sigmoid flexure is reached, when the action again increases in rapidity. This because the sigmoid flexure is converted into a double funnel, with the large ends contiguous, as soon as peristalsis is excited therein, the descending colon and the straight gut entering and leaving it at right angles nearly. The large impeding mass which is the result of every twenty-four hours' sluggishness is thus disintegrated and broken up and mixed with gas and water so completely that in a very short time, both actually and relatively, emptiness and the consecutive reaction against the distended conditions are easily, surely and without discomfort secured to the patient, a result which could not be obtained with so little discomfort by any cathartic drug, nor so rapidly by any saline not disengaging carbondioxide after it had been taken into the intestine proper, that is, had passed the pyloric sphincter.

It is asserted by an observer who has had an abundant opportunity for observation, that we may compare the rapidity of the action of aloes, epsom salt and the rapidly effervescing and slowly effervescing salines, and that the reaction is as the continued proportion, 1; 4; 5: 9. the reaction to the rapidly effervescing saline solution being hardly more rapid than the reaction to the still saline solution, while the reaction to the slowly effervescing saline solution is twice the mean between the rapidly effervescing and the still solution. This is the scientific statement of the reason why of the phenomenon I made note of in a paper published some months ago, that the Abbott effervesc-

ing saline which gives off carbondioxide slowly and for a considerable period, but gradually parting with its gaseous contents, not giving it up with almost explosive rapidity so as to foam "all over everything" as some effervescing salines do, was much the most efficient agent among the members of this group in relieving the condition commonly called sluggishness of the intestines or chronic constipation, both of which unfortunate phrases are used for this condition, and for it both alike are misleading appellatives.

But to return to the patient with whose case we began and from which we have so far wandered away, had the attending physician just happened to remember that his patient had been taking violent exercise from morning until night during a period of about sixty days, and that during these sixty days she had been eating of food adroitly prepared by skilled cooks, in every dish of which was hidden from sight, but functioning actively, one or more liver stimulating, catharsis producing drugs; and that his patient during the same period had been taking active exercise. I say, had he called all this to mind and then compared the diet to which she had been subjected since her return and the complete absence of all exercise but the very minimum with which the life's functions could have being, had he remembered these two conditions, and the other various facts which he should have seen without any serious effort, would he not, I ask it in good faith, have made the diagnosis without calling the young woman's sanity into question and sending her to a private hospital for observation?

Granted that the physicians at the sanitarium had a better opportunity for making a correct diagnosis, they took much more trouble to secure this correct diagnosis than the family physician did, but was it not an obligation laid upon him to take just this same amount of trouble and to make just as accurate a diagnosis as did the sanitarium physician, before he put a black mark upon the mental reputability of any one, and more especially, of one who could not defend herself against an intangible foe, against the suspicions of her dearest friends?

If physicians would make it a practice in all these cases to wait twenty-four hours, or even twice or thrice as long before they consent to give a diagnosis, and meanwhile would carefully and systematically empty the intestinal tract, and make proper urinary examinations before or after so doing, would not more of these cases meet with a satisfactory and speedy elucidation? An elucidation obtained without sending the patient to a sanitarium for observation as to the mental state, and the consequent innuendo in respect to their sanity, the perfect balance of their minds.

THE SINCLAIR, 163 FULTON ST.

CLINICAL REPORT.

Traumatism of The Intestines.

By HERMAN E. HAYD, M. D., Buffalo, N. Y.

Surgeon to the German and the German Deaconess's Hospitals.

A rare and interesting case occurred recently in my service at the German Hospital. A man, a Pole, 52 years of age, was injured by a plank which fell upon his abdomen at 7 o'clock in the morning. He was seen by Dr. Schroeter, who made the diagnosis of a ruptured bowel and sent the man to the hospital. At 2 p. m., I saw the patient and concurred in the diagnosis and immediately performed an abdominal section. There were no external marks or other evidences of violence. The abdomen was distended and extremely tender, while there was a general board-like hardness and rigidity of the muscles; temperature 100, pulse 128. The man was in great agony. There had been no vomiting and he had passed no gas.

Upon opening the peritoneal cavity, free fluid ran out mixed with pieces of carrot and potato, which had been eaten for supper the previous night. The bowels were quickly searched and a rent one inch in length was found in the jejunum. The edges were sewed together with through-and-through catgut suture and reinforced with silk Lembert. The peritoneal cavity was freely irrigated with warm salt solution and an abundance of carrot, potato, and undigested food was washed out; when the return fluid became reasonably clear the wound was quickly closed, after placing two drainage tubes well down into the pelvic cavity. The patient was put to bed in the elevated Fowler position and salt solution was slowly and continuously injected into the rectum, according to the Murphy method.

In a paper read by Dr. John B. Murphy, of Chicago, at the Cincinnati meeting of the American Association of Obstetricians and Gynecologists, September, 1906, on the treatment of acute diffuse peritonitis from perforative appendicitis, he reported 36 cases with 35 recoveries.

He makes a small incision and removes the appendix with as little shock, trauma, and injury to the peritoneum as possible. A drainage tube is placed in the pelvis and the wound closed without irrigation, no matter how foul the peritoneal contents are. The patient is put to bed in the elevated Fowler position and a normal salt solution is continuously injected into the rectum through an ordinary douche tip from a fountain syringe, elevated four or five inches above the level of the nates, at the rate of one and one-half pints per hour so that thirty pints are instilled in the twenty-four hours. Care must be exercised in placing the fountain syringe so that the fluid will run slowly and all be absorbed

in the rectum. Perhaps it may be necessary to elevate or lower the bag one or two inches, in case the flow is too slow or too fast.

By this method of treatment the peritoneal cavity is made, if possible, a secreting membrane instead of an absorbing one as its bloodvessels are overfilled with fluid; secondly, the blood is washed of its toxins; and thirdly, the patient is given the best chance to develop a reactive leukocytosis. Murphy maintains that by washing the bowels and irrigating the peritoneal cavity the endothelium is removed from the peritoneal surfaces, increased absorption of toxins results and, as a consequence, death takes place before reaction can be brought about.

In my case I irrigated because there was so much foreign gross material in the peritoneal cavity, which had passed out of the rent in the bowels. The patient left the operating table in excellent condition and had a fair night. On the following evening he began to fail, his kidneys only excreted ten ounces of urine in the twenty-four hours, and he died on the following morning, thirty-six hours after the operation.

The case is instructive in showing that a rupture of the abdominal viscera can take place from external violence and yet there may be no visible evidences of injury or penetration of the abdominal wall. If this patient had been operated immediately upon the receipt of the injury or a short time afterward, he probably would have recovered.

493 DELAWARE AVENUE.

SELECTION.

Acute and Chronic Indigestion.¹

BY JOHN B. DEEVER, M. D., Philadelphia.

[*Boston Medical and Surgical Journal.*]

AMONG the many heritages which civilisation brings in its wake, there is one disease so peculiar to civilized communities that its total absence may almost be considered pathognomonic of a semi-savage state of society. This disease is dyspepsia, and more particularly *chronic* dyspepsia. While acute dyspepsia is probably occasionally seen in the native Filipino and in the Hottentot or the inhabitants of Somaliland, it is unquestionably rare, and chronic dyspepsia is practically unknown. It remained for civilisation, with its overeating and underchewing tendencies, to fully develop these maladies, until at the present day they have assumed an importance in medicine and surgery second to no other affection.

1. Annual Address on Surgery, before the Lehigh Valley Medical Association, Easton, Pa., July 12, 1906.

It is, therefore, with no apologies for my subject that I have the honor of addressing you today. The only regret which can come to any speaker's mind, who has such a text for his remarks, is that the amount of time at his disposal, if not his own ability, must remain unequal to the task. Time is short and the art is long; and I must crave your indulgence if I seem to pass over in too cursory a manner some topics which may seem to deserve fuller consideration than it is possible for me to devote to them on this occasion.

There is no malady which is more easily diagnosed by the patient afflicted than is dyspepsia. It is an unheard of thing for an individual to have indigestion, either acute or chronic, and to remain unaware of the fact. Many a patient, as we all know, may suffer from extremely serious affections of the heart, of the kidneys, even of the liver and the lungs, without being at all aware of his precarious condition. But indigestion, produced by whatever cause, makes its presence felt, and usually it is a very unpleasant presence. And yet, what is remarkable about this self-assertive power of dyspepsia is, that its causes are so various, and at times so obscure. The variety of the diseases with which any other region of the body is afflicted is small in comparison with the affections of the abdominal organs. Inflammations affect all regions and every organ of the body; but with the exception of bronchitis and inflammations of the upper respiratory passages, inflammations of the digestive apparatus probably exceed in number the inflammations of every other portion of the body. Malignant growths, when occurring in the internal organs, affect the gastro-intestinal tract by preference,—with the possible exception of cancer of the uterus, which may almost be considered an external form of malignant disease. And so it is that dyspepsia, of one form or another, assumes the most important place in our nosological tables, because of its excessive prevalence. The subjoined-table shows the relative frequency of the affections of the gastro-intestinal, the respiratory, the genito-urinary and the cardiovascular systems in the patients applying to our dispensaries.

Among 31,157 patients there were 4,924 or 15.8% in whom the gastro-intestinal tract was affected. In 7,193, or 23%, the respiratory system was diseased. In 819, or 2.7%, the genito-urinary system was diseased. In 903, or 2.8%, the cardiovascular system was diseased.

And among children the proportion of gastro-intestinal cases is more than twice as great as diseases of the other systems, bearing about the same relation to the whole as in the case of adults.

Among 4,678 children there were 1,716, or 36.6%, in whom the gastro-intestinal tract was affected. In 1,392, or 29.7%, the respiratory system was diseased. In 119, or 2.5%, the genito-urinary system was diseased. In 41, or 1%, the cardiovascular system was diseased.

Now, of course the surgeon does not desire to monopolise the whole of that category of diseases described by the term dyspepsia. Selfish as he is thought to be and eager for more work as he has always shown himself, he is yet ready to recognise that there is a certain number of these cases,—indeed, a fairly large proportion of the whole,—which are in reality medical, in that no form of surgical treatment has yet been devised for their cure. Most cases of acute dyspepsia are undeniably medical; most cases of chronic dyspepsia can now be relieved by surgical means. And it is the duty of the progressive medical man, be he physician or surgeon, to make himself familiar with all such affections, and to be able to correctly advise his patients as to whether medical or surgical treatment is to be preferred in their particular case.

It is apparent, then, that diagnosis is in these diseases, as in all departments of medical science, the essential prerequisite to successful treatment, for although we must frankly acknowledge that there still exist some diseases which cannot be successfully treated even when their nature is known, it is even more certain that futile in the extreme are the misdirected efforts of that practitioner who attempts to relieve a patient, of the nature of whose malady he is totally ignorant.

In determining the cause of dyspepsia, two principles appear to me to be of importance: in acute affections trust to physical examination rather than the history, and in chronic diseases put more reliance on an accurately detailed clinical history than on the physical signs. I say, only, to put more confidence in the one than in the other; not to blindly trust one to the absolute exclusion of the other. Such a course could but be productive of disaster. But, as a general rule, physical signs are reliable in acute abdominal disorders, and in chronic diseases the clinical course of the disease frequently reveals the diagnosis unaided by other means. After these two cardinal methods of diagnosing a malady have been used intelligently and exhaustively, then, and then only, will the attendant have recourse to mechanical means, such as blood examinations, skiagraphs and other laboratory methods. Most important is it, then, that physicians strive to recognise organic conditions in the stomach, and differentiate them from non-organic or functional disorders. It must be acknowledged that it is not only a waste of time and the re-

sources of the patient to try to cure mechanical conditions medically or dietetically. Indigestion, acute or chronic, included under the name of dyspepsia, is a disturbance simply of the natural process of digestion. So soon as we have discovered a mechanical explanation for the condition, so soon can the cause be relieved by surgical intervention only. Persistent indigestion should call for investigation before we decide it is due to a functional disorder of the stomach. It is not to be understood that I would have you think that all serious disturbances of gastric digestion are due to anatomical changes in the stomach. Many cases of dyspepsia which I see are not due to organic disease of the stomach but to abnormal conditions of the circulation and nervous system. When the patient complains of pain following the ingestion of food, vomiting, vomiting of blood, with or without loss of appetite, is pale and weak, and has lost flesh, and experiences relief by rest in bed and a restricted diet, this must mean, in almost every instance, organic disease of the stomach. Symptoms, such as fulness in the abdomen after eating, flatulence, heartburn, poor appetite and constipation, are those chiefly mentioned by patients and considered by physicians as found in dyspepsia. If such a patient is carefully examined and no organic disease can be detected, then we have to describe the case as one of functional disorder of the stomach.

It is unfortunate that investigation by test meal and the use of the stomach pump has not been of more value to us. In my experience I have no hesitancy in stating that they have no value where a differential diagnosis between organic and functional disease is to be made. Careful physical examination of the abdomen and other regions of the body, with a reliable history of the patient, is of much more moment than chemical examinations. Lavage, as now practised by many internists and stomach specialists, is not only overdone, but misleading, not only to the patient alone, but the physician as well.

While every pain in the abdomen should arouse the suspicion of appendicitis being present, the family physician is well aware that this disease is by no means the only cause of abdominal pain. But this I will say, that many and many a patient with appendicitis develops an abscess or a spreading peritonitis from no other cause than that the family physician has committed the crime of omitting a physical examination of the abdomen. Many hundreds of such cases have I seen. On the third or fourth day, when the attendant finds that anodynes and the liquid diet have not relieved the pain in the abdomen nor quieted the vomiting, then, alas, he recognises, by a physical examination too long delayed, that the pain which he had thought so trivial as perhaps

even to have prescribed for it without seeing the patient,—a culpable treatment *in absentia*,—he realises, I repeat, that this seemingly trivial pain was in reality that most treacherous and malevolent disease, known by the name of appendicitis. Such a physician is more culpable even than one who, though aware of the true nature of the malady, yet attempts its cure by medical means. The result to the patient is very likely the same in either case; but carelessness is more to be blamed than ignorance.

Appendicitis is indeed a disease which of all other acute affections, ushered in by acute indigestion, can be most safely diagnosed by a physical examination. No patient with acute abdominal pain should ever be dismissed without having been submitted to palpation of the abdomen. The history is also of great importance, for by the sequence of symptoms, which in appendicitis is nearly pathognomonic,—by the pain first, then the vomiting, and at last the localised tenderness,—a vast horde of other abdominal affections may be readily excluded. When vomiting precedes the pain suspicions are at once aroused, and in most instances, as has been pointed out by Murphy, it will be found that the disease is not appendicitis. In children, the physician must consider simple overeating, with resultant acute gastritis—in such cases the history of overeating or of the ingestion of indigestible food, along with the negative physical examination, will make evident the true nature of the case. The swallowing of corrosive liquids or poisons must be constantly kept in mind, not only in children, who may be ignorant of the nature, but in adults, who may have ingested poison by mistake, in the dark, or with suicidal intent. The history is in all such cases of paramount importance, and is usually so clear as to leave no room for doubt. The various forms of intestinal obstruction must always be considered in patients with acute abdominal pain and vomiting. Frequently the acute pain of strangulation precedes the vomiting by a number of hours; and where the clinical history is negative for previous attacks of peritonitis or for abdominal operations, a careful search of the hernial rings will frequently reveal the presence of a strangulated hernia. In all conditions in which the peritoneum is involved in inflammation the salvation of the patient lies in early operation. Acute intestinal obstruction of all varieties,—strangulation by bands, strangulated hernia, internal hernia, intussusception or volvulus,—all are most successfully treated by operation, and the earlier the operation the surer is the cure. Internal strangulations can only be relieved by operative means, and early operation in strangulated hernia usually admits of radical cure of the rupture.

In the treatment of intestinal obstruction I desire to enter a plea for the old operation—Nelson's operation—of enterotomy. In these days of advanced surgery where the desire,—and a proper enough desire it is,—is to cure our patients by one operation alone, we are at times tempted to do too much, and in our desire to shorten our patient's confinement to bed we sometimes abbreviate his sojourn in this world. In cases of strangulation, where excision of a portion of the gut is required, our hope naturally is to be able immediately to restore the lumen of the bowel by an intestinal anastomosis. Usually this can be done with safety; but there still exist patients who are operated on so late that the toxemia—the copremia—from intestinal obstruction is so far advanced as to make any extensive operation very hazardous. It is in such patients, as I have said, that our attempt to complete an ideal operation results in the death of the patient. Such cases as these are greatly benefited by direct drainage of the intestinal tract, and to these Nelson's operation is particularly applicable. Even when the temporary establishment of a fecal fistula is not advisable, there can, I think, be no question that the distended bowel should be thoroughly emptied by some means before completing the operation. Either by emptying the proximal gut through the abdominal wound, before completing an intestinal anastomosis after resection of gangrenous bowel, or by evacuating the intestinal contents by means of massage of the bowel into a rectal tube passed high into the colon, I have in several instances successfully cured patients in whom toxemia from intestinal strangulation was marked.

Another prolific source of acute dyspepsia is disease of the biliary passages—infectious disease in practically all cases. Attacks of biliary colic, which are in many instances due rather to acute cholecystitis than to the passage of gallstones, are distinguished from recurrent attacks of appendicitis chiefly by the absolute freedom from indigestion during the intervals enjoyed by patients with gall-bladder disease. Patients with chronic, with recurrent, or with relapsing appendicitis are rarely entirely free from digestive disturbance. But it appears to be in some ways characteristic of gallstone patients that during the interval between their acute attacks they enjoy a most excellent digestion. They will relish lobster mayonnaise and deviled crabs with other highly seasoned food, and will digest their meals well; and then suddenly, out of the clear sky, as it were, and with no apparent relation to their meals or their indiscretions in diet, will come an attack of gallstone colic, with its intense nausea, its agonising pain, and its marked prostrations of strength.

Perhaps, before leaving the subject of acute indigestion, it will be well to mention the affection variously known as hyperemesis

lactantium, congenital stenosis of the pylorus, infantile pyloric hypertrophy and similar titles. Whatever be its true nature, the symptomatology of this disease is fairly constant, and successful issues under operative treatment are rapidly becoming more frequent. Babies who formerly died of marasmus when a few months old, after a wretched existence characterised by persistent cumulative vomiting and by constipation, are now (thanks to the initiative of surgeons, such as Cautley and Dent in England, Nicoll in Scotland, Meinhardt Schmidt, and Trantenroth on the Continent, and Willy Meyer, Scudder, Quimby and others in this country) given a fair chance to assimilate their food and develop into healthy adults.

When we come to a consideration of the causes of chronic indigestion, it is necessary first to urge the postulate that persistent symptoms in any part of the body cannot be due to mere functional disturbances in that part. We cannot deny that through the intervention of the nervous system certain functional disorders may be produced in the portion of the body remote from the site of the actual structural change. Such conditions as the vomiting, which is frequently characteristic of brain tumor or of the abdominal pain and crises felt in Pott's disease and in locomotor ataxia are familiar instances of this truth. But surgeons do maintain and they are glad to see so able a physician as Professor Baus of Leeds² coming to the same conclusion, that persistent indigestion in the stomach, for example, must be due either to actual organic change in the stomach itself, or else to nervous or circulatory disturbances produced by disease in some other region of the body; that such persistent symptoms cannot be due to any functional disturbance of the organ affected, and that if disease of other regions of the body which might have a local influence on the functions of the gastro-intestinal tract can be excluded, we may with absolute and unerring certainty conclude that the local disease is organic in nature.

If, then, a patient complains to us of persistent or recurrent indigestion, which is relieved not at all or only temporarily by medical measures, we are surely justified in offering them as a solution of their structural disorders, some form of mechanical remedy; in short, some form of operation.

Chronic appendicitis does not, perhaps, today occupy so prominent a position in surgical discussions as it did a few years since, mainly because, I suppose, it is no longer so new. Its place has since been taken by gall-bladder and gastric affections, but it nevertheless is a disease widely prevalent, and very real and imminent in the sufferings it causes. But it is a disease which to

2. Lancet, 1906, i, 1588.

a very large extent is ignored or disbelieved in by the average physician, mainly because, I regret to say, one of the waves of injudicious surgery which periodically swell through our ranks was responsible for the removal of many an appendix which was not really productive of discomfort; the result being that physicians who saw patients supposed to have chronic appendicitis made not one whit better but rather worse by the removal of the organ,—the result being, I repeat, that physicians not unnaturally became skeptical as to the existence of such a morbid entity as chronic appendicitis.

Now it appears to me that in deciding from mere symptoms whether or not a patient has a chronic inflammation of his appendix, the surgeon should be very cautious; indeed, for my own part, unless such a patient presents a clear history of previous acute attacks, I am loth to operate; for although I have called attention to the fact that in cases of chronic indigestion the clinical history of the patient is usually more reliable than is a physical examination, yet it is absolutely essential to make a correct diagnosis to have either the clinical history or the physical examination absolutely explicit and conclusive if we would rely on one to the exclusion of the other. For a satisfactory diagnosis a certain definite sum total of factors is essential; and if we cannot obtain a sufficient quota from each of the two factors,—the history and the examination,—then we must obtain our whole quota from one to the exclusion of the other. Especially true is this in the case of chronic appendicitis. If the clinical history is explicit as to previous attacks of appendicitis, the diagnosis may safely be made even though the physical examination be negative. Or if the palpating hand can unmistakably feel a thickened, tender appendix, then, even though the patient never has had a frank attack of acute appendicitis, but merely presents a history of vague abdominal discomfort, possibly more or less localised at times to the region of the appendix, then, under these circumstances of positive physical signs, the clinical history may be disregarded, and the patient assured that operation will relieve him of his distress.

The danger, and it is not as remote as was formerly thought, of chronic disease of the appendix eventually becoming malignant or tuberculous in character, should not be lost sight of. I have recently³ drawn attention to the fact that routine examination of appendices removed at operation reveals primary malignancy in as many as 2% (?) of the cases; and Professor Broca⁴ has spoken of the danger of incipient tuberculous disease of the cecum being overlooked in children with chronic appendicitis.

3. Tr. Amer. Surg. Assoc., 1906.

4. Lancet, 1906, i, 1584.

So, likewise, with gall-bladder disease. Persistence or recurrence of symptoms indicates the existence of structural changes; and when once biliary calculi have formed, their attempted removal by medical means is always futile. As Dr. Kelly, the pathologist of the German Hospital, Philadelphia, has pointed out in his recent Mütter Lecture (delivered before the College of Physicians, Philadelphia, 1906), "We now know the thousands of gallstones said to have been passed by the bowel after the administration of olive oil and similar preparations are merely masses resembling gallstones in outward appearance, and due to the basely deceptive powers of the olive oil acquired in its passage through the intestinal tract." For not only are the stones commonly multiple, but many of them are so large that their passage through the ducts is a physical impossibility; and although in long standing cases of cholelithiasis large calculi are occasionally discharged into the bowel by way of cholecystoenteric fistulas, any physician who should anticipate with pleasure such a solution of the difficulty would be more fit for the days of medieval alchemy than for modern medicine or surgery. Moreover, even were all the calculi to be passed through the intestine by medical means, the infection of the gall-bladder would in most cases not only persist, but soon cause the formation of other calculi. For until physicians can combat as successfully as does surgery the infection which is the underlying condition in all cases of cholelithiasis, the less they have to do with acute complications of gallstone disease the better. As Dr. Kelly points out in his Mütter Lecture, "The favorable results of medicinal treatment in the vast majority of instances by no means indicate the cure of the disease, but merely the restoration of latency,"—and although this is "by no means an undesirable achievement," it is far from the *summum bonum* which is attained by operative means.

It may be stated, in passing, that in my own experience, as I believe in that of most surgeons, lesions of the pancreas are almost without exception due to pre-existent disease of the bile passages. Carcinoma of the pancreas may be an exception to this rule, but it is frequently so far advanced in its course before recognised that it is often impossible to determine where it had its primary origin,—whether in the bile duct or the pancreas itself; and its detection is in the end quite as often due to implication of the biliary apparatus as to manifest disturbances of the functions of the pancreas itself.

Chronic gastric dyspepsia has of late years afforded surgery a field for most signal triumph. I have on previous occasions quoted, and I take this opportunity of again quoting, Professor Kocher's statement in regard to the cure of gastric dyspepsia by

surgical means, both because of their intrinsic value and because his name gives them added authority. Says Kocher,⁵ "The majority of practitioners do not sufficiently realise what brilliant results are to be obtained by operative means in chronic affections of the stomach, commonly known as gastric catarrh. Not only can the numerous dangers of ulcerating affections of the stomach, such as hemorrhage, perforation, transition in cancer, be prevented, but the disease and its results may be so rapidly and certainly cured that the medical treatment of obstinate cases must be put in the background. . . The pain in the stomach disappears immediately after the operation. This is the invariable rule. . . The patient does not require to pay any further attention to the nature of his food. The vomiting disappears. . . . The bowels become regular. . . Repeated investigation of the gastric contents shows that there is a progressive improvement in the process of digestion; hyperacidity diminishes; if too little acid is present it becomes increased, a statement which is in agreement with Steudel, Carle and Fantino, Kautsch, Hartmann, Sipault and Mintz."

Even if we do not consider the relief of the patient's distressing symptoms,—pain, anorexia, flatulence, vomiting, and so forth,—as sufficient justification for operation, which it is, there yet remains the actual saving of life which operation procures by prevention of the later complications to which reference has been made. When we consider that under medical treatment 5% of patients with gastric ulcer die from hemorrhage, and 15% from perforations, the actual life saving value of operative treatment is evident from the fact that in skilled hands over 95% of patients recover from the operation, and that practically every one who recovers is permanently cured and relieved of all anxiety as to the occurrence of hemorrhage or perforation. And perforation and hemorrhage are not the only dangers to be feared in non-operated cases. It is becoming more and more widely recognised that in pre-existing ulcer, gastric cancer has its most frequent origin. Mumford and Stone⁶ found this course to have been pursued by the ulcer in 41 out of 50 cases of gastric carcinoma recently studied by them; and Jedlicka⁷ quotes Ssapesko as stating that among 100 cases of gastric carcinoma he found only 10 in which the cancer was not engrafted on a preceding ulcer. Jedlicka himself found that of the patients whose stomachs he resected for supposedly benign disease, more than one fourth gave microscopical evidence of carcinomatous changes in the ulcerated area. In deciding which patients are and which are not subjects

5. *Op. Surg.*, Lond., 1903, p. 199.

6. *Surgical Aspects of Digestive Disorders*, 1905.

7. *Op. Behandl. d. chron. Magengeschwurs*, Prag., 1904, s. 24.

of organic disease, I think reliance is to be placed first on the clinical history of the patient, then on the physical examination, and lastly, upon the results of laboratory methods of research. As I have already stated, in many cases the clinical history alone makes the diagnosis certain. Pain in a fixed spot in the epigastrium, soon after eating, this pain being relieved only when the stomach is emptied by vomiting or by the completion of digestion; the periodical but by no means regular occurrence of hematemesis; the presence of such symptoms in young and anemic females, —are all factors which speak for themselves of the presence of open ulcer, which render further investigation nearly unnecessary.

The existence of dilatation of the stomach due to pyloric stenosis can likewise usually be made without resort to laboratory methods when the patient presents a history of long-standing gastric dyspepsia, possibly attended years before by one or two attacks of hematemesis, but more recently characterised by persistent and cumulative vomiting,—by which I mean vomiting of food that has been accumulating in the stomach for days before, but which is only rejected when the dilated stomach has reached the limit of its capacity. In such patients an ordinary physical examination will often make evident the gastric dilatation; but if not, I prefer to dilate the stomach with air through a stomach tube, or by the administration of a Seidlitz powder in two portions, thus distending the stomach and rendering its outlines distinct to percussion. Such methods I think should only be employed in patients who are believed to have no acute ulceration present. In patients with open ulcer I consider the mere passage of a stomach tube dangerous, while distending the stomach with air might very probably cause perforation or provoke nearly fatal hemorrhage.

The detection of hyperchlorhydria I think in every way inferior to a determination of the motor power of the stomach. The ingestion of salol, with its subsequent detection in the urine, I do not regard as being so reliable a method for testing the motor power of the stomach as the use of a test meal, the remains of which are removed by lavage at the end of six hours. After the lapse of this period the normal stomach should be empty; but it should not be forgotten that increased motor power is not unfrequently present in patients with open ulcer and unobstructed pylorus, since the abnormal amount of hydrochloric acid usually present in these cases accomplishes gastric digestion of proteids in a precociously short time.

In the treatment of malignant disease in the stomach, the most important thing is to *cure in the precancerous stage*. I will not go so far as to state that gastric cancer, when so far developed as to be positively diagnosed before operation, is necessarily eventually fatal, even though the patient's life may be prolonged,

by resection, for a period of from one to eight years; but I will say, that with the knowledge we at present possess, no patient who presents symptoms of chronic gastric dyspepsia should be allowed to go on his way without prompt operation as a preventive of malignant disease. Because there is no manner of doubt that the absolute cure of a fully developed gastric cancer is one of the rarest things in surgery; it is, in fact, almost unknown. One or two patients have been known to survive gastrectomy for carcinoma for as long as eight years, and to be still in good health when last reported; but the patients who have most chance of ultimately remaining free from recurrence are those who have been subjected to gastrectomy before the diagnosis of malignancy could be made through the unopened abdominal wall.

I do not intend to argue here the advisability of operating on cases of gastric cancer on the ground that life will at any rate be prolonged and death rendered less unpleasant by this form of treatment, even though radical cure be not anticipated. I consider this a very sound reason for doing the operation; indeed, so far as statistics up to the present are concerned it is a reason for operating on these patients which has more in its support than any other; and in those rather unusual cases of gastric carcinoma, in which the symptoms develop suddenly with no previous history of gastric dyspepsia, a patient past forty years of age becoming suddenly afflicted with anorexia, rapid emaciation and tumor formation,—in such cases, I repeat, it is the only reason which justifies operative interference at all, since in such patients permanent and total cure is all but unknown.

ABSTRACTS.

Intravenous Injection of Collargolum in Puerperal Fevcr.

By DR. PAUL HOCHSEISEN,

Staff Physician, detailed as Assistant at the University Gynecological Clinic of the Royal Charite Hospital at Berlin.

[*Medizinische Klinik*, Nos. 31—4, 1906.]

HOCHSEISEN'S exhaustive study of collargolum in puerperal fever (*Medizinische Klinik*, Nos. 31|4, 1906) opens with a review of its literature in this field. This is overwhelmingly favorable, though the effect from collargolum was in many cases subjective only. Subjective improvement, however, is an important criterion of the value of a remedy for general septic disease; these infections run an extremely varied course and the prognosis is not infrequently an opinion based on subjective symptoms. Especially is this true in the class of sepsis known

as puerperal fever, which is no clinical entity and includes processes that differ widely, both etiologically and symptomatically.

The author details the histories of 52 cases which he had in the Charité during two years, dividing them into the following groups: I. Sapremic and septic endometritis. II. Phlegmasia alba dolens. III. Pyemia. IV. Septicemia. V. Metritis dissecans. VI. Adnexal tumors and parametritis. VII. Peritonitis.

While in most cases of sapremic and septic endometritis the effect on the temperature was not very marked, the pulse usually became slower and stronger and the general condition always improved. In phlegmasia alba dolens there also was general betterment, and the chills ceased so suddenly when collargolum treatment was instituted that the effect must be ascribed to the remedy.

In the 13 cases of pyemia three died; but two of the fatal cases were moribund on admission and the third was hopeless from the first. Six of the cured cases were of the severest type and their recovery was undoubtedly due to collargol. All other resources were of course also used, the use of stomachics playing an important role; but collargol proved to be the very best stomachic,—a fact which demanded recognition again and again. Perhaps the most important immediate effect was the subjective improvement. The effect is best seen in the worst cases, with pneumonic processes and endocarditic ulcerations. Here its action is sometimes fairly marvelous and cannot be justly depicted in the histories. These cases were formerly almost always fatal.

All the septicemia cases died; nor did collargol seem to have any effect in the three in which it was tried. In metritis dissecans, collargol cannot of course influence the process in the uterine muscle; the utmost it can do is to combat the general infection.

As to adnexal tumors and parametritis, Hocheisen cannot confirm the resorptive action of the drug on infiltrations and suppurative foci that some observers recorded. When fever is high, collargol is beneficial by its antifebrile effect and favorable influence on the general condition. It is most valuable, however, before localisation of the process occurs and when general infection is threatening or already present. It may also be that it hastens localisation. In three peritonitis cases in which collargol was used it did not show any effect.

The puerperal mortality in the Charité during the two collargol years was much below the mortality in any other year of the past decade, especially if only the pyemia, septicemia and peritonitis cases are considered. In these the mortality in the collargol

years is 27% less than the ten-year average; it is 19% less than in the best other year and 45% less than in the worst. Nor were the collargol cases lighter than usual; rather can it be said that good results were attained despite unusually severe types. The pyemia cases gave a mortality of 23% as against the ten-year average of 58%. The timely intravenous injection of collargol would save many otherwise fatal cases.

Hocheisen concludes: Collargol, while not a specific, is an invaluable aid in suitable cases. It diminishes the temperature, stops the chills, effects subjective and objective improvement, induces a welcome diaphoresis, stimulates appetite and produces sleep. Very often it diminishes the pulse-rate and regulates blood-pressure. Its special domain is pyemia, where it minimises the mortality. Endocarditis and septic pneumonia seem especially susceptible to its influences; the finding of collargol on the ulcerated cardiac valve in one of the autopsies perhaps points out the way in which it acts on septic food and thrombi reached by the blood current. Possibly it inhibits the decomposition of thrombi; probably it favors the localisation of processes that have extended beyond the uterus; certainly it combats the progress of the general infection.

It is, therefore, indicated when there are signs of a beginning general infection and as long as thorough localisation of the disease process has not occurred. Three to five cc. (45 to 75 m.) of a 2% collargol solution or smaller amounts of stronger (up to 5%) solutions should be injected intravenously on two or three consecutive days. This usually suffices, but the injections can be repeated as desired. The technique is simple; if the insertion of the needle into the vein through the stretched skin does not succeed, the vessel is laid bare.

The injection is painless; if pain is felt or the skin at the site turns blue, it has been subcutaneous, is inefficacious and occasions infiltration. Quite recently Privy Councillor Dr. Bumm had two cases of grave pyemia in his division treated with collargol, and their favorable course confirms Hocheisen's observations.

CORRESPONDENCE.

Food Preservatives and Appendicitis.

Mr. Langdon, food expert, gives his views concerning boric acid as a preservative.—Thinks it harmless, and the most innocent antiseptic extant.—Coproliths and appendicitis.—Constipation, diarrhea and other digestive disturbances prime factors in developing appendicitis.

EDITOR BUFFALO MEDICAL JOURNAL.

SIR: I have read numerous articles on the Pure Food Question and the evil effects of coloring matter and preservatives on the

human system, but not until recently have I perused articles written by physicians who claim that boric acid and boron compounds, which are used quite extensively for preserving food, are the cause of appendicitis. An article appeared in the "New York Medical Journal" April 17, 1906, and in "Truth," of Buffalo, June 30, 1906, stating that boric acid was the cause of appendicitis.

If such statements were true, however, the English Nation would be wiped out of existence. They have consumed foods preserved with borax for decades, and if food preserved with Boron Compounds was dangerous to health, the entire medical fraternity would have learned of it years ago.

I have had a great deal of experience with boric acid and have always found it a soothing, cooling, healing, sedative agent. The action of boric acid on the cuticle and mucous membrane is to allay inflammation, not to cause it. It is recognised as the most innocent antiseptic extant. It is an antiseptic which never irritates nor inflames and thus enables a natural healing process to take place without interruption. Its action on the organic tissues is seen by the blood. Concentrated boric acid mixed thoroughly with fresh blood only delays and cannot prevent coagulation.

In spite of all that has been said against boric acid, it is clear that its action on albuminous bodies has no analogy with any other acid except carbonic acid gas. It has been stated that weak or diseased kidneys could not eliminate boric acid. It is a fact, however, that it forms remedies of great value in kidney diseases. If the vermiform appendix were inflamed, boric acid would have a tendency to allay the inflammation instead of exciting it. Solutions of boric acid have been used in every cavity of the human system with beneficial instead of detrimental results.

That cases of appendicitis are more numerous now than they were years ago cannot be denied. Years ago, however, such cases were diagnosed differently. In the census year of 1890 there are no records of any appendicitis cases. In 1900, five thousand one hundred and eleven cases were reported. There is no doubt that a few cases are caused by foreign bodies entering the appendix. Coproliths are found much more frequently, however, than foreign bodies.

Bryant, in his paper, published in the "Annals of Surgery," February, 1903, states, "I found in one hundred and twenty-four cases, abnormal matter in 70 per cent. of the males and 55 per cent. of the females." Renvers, in the "Deutsche Medicinische Wochenschrift," 1891, found in four hundred and fifty-nine autopsies, one hundred and seventy-nine coproliths and about sixteen foreign bodies.

We do not as yet understand the functions of the appendix. Without doubt almost every case of inflammation in the iliac

region can be traced to a diseased appendix. Fecal matter is forced into the appendix, which is so constructed that it cannot drain itself, hence causes inflammation. The veriform appendix being a weak organ is unable to protect itself.

Constipation would have a tendency to interfere with the supply of blood by direct pressure on the single artery which supplies the blood.

A great many cases can, no doubt, be attributed to our bad habits of eating too much and masticating our food too little, which causes constipation, dyspepsia and general derangement of the functions. The hurrying restless lives we lead certainly interfere with the normal working of our digestive organs. I firmly believe that indigestion, constipation, diarrhea and other digestive disturbances are the prime factors which favor the development of appendicitis.

H. H. LANGDON.

427 WEST 22D STREET,
NEW YORK, SEPTEMBER 27, 1906.

OBSTRUCTION OF THE COMMON BILE DUCT.—John F. Erdmann, after discussing the causes and symptoms of bile-duct obstruction, says that when all medical aid has been given without results, or if the symptoms are so urgent as to demand immediate surgical interference, the condition narrows itself to a question of surgical technique and after-treatment. The writer in exposing the duct, makes the incision over the right rectus, splitting the fibres in the middle and internal, or middle and external thirds, for a distance sufficiently long to explore the duct. If the stone is located or adhesions demand it, the incision is rapidly enlarged to give ample working room. After the stone is removed, a fish-tail rubber tube, with from one to three openings, and about ten or twelve inches long, is passed into the duct in its proximal direction for its lower three-quarters of an inch, sufficiently to bury the apertures only. The tube is held in place by a suture of chromic catgut. The history of an interesting case concludes the paper.—*Medical Record*, September 22, 1906.

"I always thought," remarked an English judge, "that a parasol and a sunshade were the same."

"No," replied the witness on the stand; "a sunshade is to keep the sun off; a parasol is to flirt with."

Necessarily.—Dinglebats: The oculist charged you \$5 for taking a grain of sand out of your eye? That's pretty steep, isn't it?

Himpsley: I thought so, till I looked over his bill. It was for "removing foreign substance from the cornea," and, of course, that costs more.—*Chicago Tribune*.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 284 FRANKLIN ST., BUFFALO, N. Y.

VOL. LXII.

NOVEMBER, 1906.

No. 4

The Army Medical Corps.

THERE is every prospect that the long delayed and much needed expansion of the medical corps of the United States Army will be brought about early in December at the coming session of Congress. The delays which have beset the efforts of the Surgeon General of the army to secure legislation bringing about the reforms he has planned, have been so persistent that a less sincere man would have been discouraged; he would have felt the pressure of officialdom, that dank, smothering, enveloping atmosphere which has strangled so many progressive movements in so many directions from almost time immemorial. It may not always have been because the reforms suggested were not recognised as necessary; possibly in some cases it has been because it was "inadvisable at this time;" yet in this particular instance, the expansion of the medical department of the army, the delays have worked a grave danger and placed the members of the department in an unenviable position, to say the least. Here is a corps of men, highly educated in technical medicine, bound down by tradition, kept far below a numerically efficient force by legislative unconcern, which spends lavish millions at large and squeezes the dimes which are given to one of the most important departments of army administration.

The army medical department has not been allowed to keep pace with army expansion, and the result has been that the numerical strength of the medical corps has been far below an efficient figure. To make up the deficiency, which was impossible of addition by reason of legislative restrictions, it was, and has been for years, necessary to employ civilian physicians. Up to a short time ago these physicians were known as "acting assistant surgeons" and were given relative rank of first lieutenants. They were permitted to wear the uniform of a United States army medical officer, with the exception that the collar insignia, and the shoulder straps were of silver instead of gold. That was the line of separation, the identification mark, between the commissioned medical officer and the acting assistant surgeon.

Even at that, with the benefits and privileges which he was permitted to enjoy, the acting assistant surgeon was giving more to his country than any other individual who served in the army, and for this reason: In the event of illness, disability or death, his usefulness to his country was at an end; his contract was annulled and he was dropped. He was not eligible to apply for a pension; in the event of his death his family, however dependent they might be, would have no official right to Government aid. If he lived and were to return to civil life without injury, he had done his duty and was merely fortunate. He had performed professional services which in civil life would have paid him many times the \$150 per month which his contract brought him; yet in all the service which acting assistant surgeons have put in there has yet to be heard a single complaint of the amount of money paid for the services rendered. That, apparently, has always been a secondary consideration. The real complaint has been one of lack of fairness, and surgeons general for years past have made futile efforts to correct the evil. In spite of this, in spite of the protests of the profession, the civilian physician was further humiliated by being deprived of even the title of "acting assistant surgeon" and was officially made a "contract surgeon" with the right to wear the letters "C. S." on the collar of his "uniform." As a "contract surgeon" his official position was a joke. He in many cases was the only medical man attached to a command; the health and physical well-being of the fighting force was in his keeping and, although he was officially entitled to be "shown respect" by the enlisted man, he was an official cipher in spite of the fact that he was performing all the duties of a commissioned officer with the exception of sitting on courts-martial.

The one place in officialdom where he was regarded as more than a mere civilian attached as a sort of a necessary barnacle to the army, was the Surgeon General's office, and General O'Reilly and his staff have done their utmost to place him in a more dignified position. Army surgeons received him and treated him as their equal always.

A bill was prepared two years ago increasing the strength of the medical corps and providing for the formation of a reserve corps, and its passage will remove all the obstacles which now beset the surgeon general's office in the proper and efficient administration of the medical department. The bill was approved by the secretary of war and the general staff; President Roosevelt gave it his hearty approval and it was introduced in Congress. It passed the senate and was sent to the house committee, which reported it favorably after slight amendment. There was an-

other army bill under consideration at the time, a bill affecting the Ordnance department. The Speaker did not, for some occult reason, see the wisdom of permitting both bills to go through during the same session, and naturally the medical bill was held up, but with a positive promise that it would become a law in December of this year.

All that is necessary now is to have the bill called up. It will then be passed by the house and the conference and final passage will be a matter of form. The medical department of the army will then be placed on a numerically efficient basis and the medical reserve corps will be the nucleus of a body of well-trained medical men who will be available for service in case of necessity. And they will have rank; for with their appointment they will be commissioned as first lieutenants and assistant surgeons of the reserve corps. They can never attain any higher rank in the corps; they will be paid only when actually on duty with troops, but they will be ready for service; they will be conversant with the multiplicity of executive detail which falls to the lot of the army medical officer; they will understand the "paper work" of the army; they will know how to care for government property and there will be a compact, well-trained body of efficient medical officers at the command of the surgeon general, who may be called on for efficient service should necessity arise.

For years the army has been notoriously deficient in medical officers, and never was the need for an increased corps more apparent than at the present time, with the large body of troops on duty in the Philippines and quite 7,000 doing service in Cuba.

It has been a penny wise, pound foolish attitude which has delayed the increase of the corps up to this time and now that relief is so close at hand, there should be concerted effort on the part of the profession to aid the calling up of the bill which is on the eve of passage. And every physician can aid in this by requesting the earnest co-operation of the congressman of his district.

An Electric Instrument Shop.

UNTIL recently one of the greatest drawbacks to the satisfactory use of electro-therapeutic instruments in Buffalo, has been the inconvenience to which physicians have been put of having to send out of town for parts and repairs. However slight the break the whole instrument must be sent to another city to be placed in workable condition. Even when sent to local repair shops of a purely electric character the work done was hardly satisfactory because of the lack of the special technical knowledge required in the upbuilding of the modern electric lighted instruments. The busy physician using instruments or appliances

of an electric type need wait no longer now, than the time necessary for the passage of a telephone message to place his defective instrument in the hands of an expert, since the Buffalo Electro-Mechanical Company has begun business at 83 West Chippewa street. The experts employed here are thoroughly conversant with every intricacy of all electrotherapeutic apparatus; they suggest methods of betterment in the use and care of such instruments so that the best result with the least destruction may be secured. Not alone that, but they make instruments from the very foundation. The company is in constant touch with electrotherapeutic advance and every part of all the standard appliances is in stock and can be supplied at a moment's notice; all the standard lamps from the smallest to the largest used, and of every type, may be had by special delivery if necessary for the trouble of telephoning.

Physicians using electrotherapeutic instruments and apparatus may be assured of immediate service in the future, by asking that one of the company's experts be sent to his office to look at his outfit and make record of parts and sizes which it may be necessary to replace, so that an order may be filled without delay. For this inspection and recording of sizes of lamps and parts no charge will be made. All that is necessary after that is a telephonic order and the required part will be delivered at once. The company does not confine its electric activities to therapeutics; it has special experts in all other branches of electric work. A useful instrument which the company will soon put on the market is a small diagnostic lamp for office work illuminated by dry cell batteries.

THE trained nurse idea has caught on tremendously in France (*The Tribune*, October 17), where at last a training school has been opened. Hitherto the French nurse has been a person to be dreaded. Either she was a "Sairey Gamp," with no more medical knowledge than she could tuck away in her apron pocket, or she was a Sister of Mercy, trained in a convent with a view more to the healing of souls than of bodies. The nurse à l'Anglaise was a capable, businesslike person, with a wholesome respect for herself and her profession and a practical skill in excess of many a country physician. To know her was to approve, and the French, with their good practical sense, have decided to duplicate her. Hence the new training school at Bordeaux, where the nurses—well housed and well instructed—are under the supervision of an Englishwoman, a Miss Elston, who has been trained in the London hospitals. The work seems to appeal to the better class of French girls of good bourgeois stock and with a lycée

training. The French nurse, new style, will soon be seen in every hospital in France.

It is unnecessary to present any argument to well informed physicians or to educated dentists in regard to the advantages of oxygen as a germ destroying agent. Pure air is always well laden with oxygen which is the greatest purifier in nature's laboratory. Chemists in recent years have given us a combination of oxygen and lime which has been named "Calox" and which is the greatest mouth purifier that has ever been offered to the people. Every person of refinement desires to preserve the teeth. Calox not only sweetens the mouth but it prevents decay through destruction of putrefactive germs. Anyone who desires to test the efficacy of Calox as a dentifrice should send for a sample to McKesson & Robbins, 91 Fulton street, New York.

"THE PRACTITIONER" sounds a note of warning (*The Tribune*, October 18) against the dangers of the strenuous life: It is good to be strenuous, but it is also good, as the poet tells us, to play the fool, or at any rate to be idle at the right time and in the right way. This is just what the strenuous man forgets, and the consequence is too often premature breakdown,—a common event in the storm and stress of modern life. The strenuous life is helping to overcrowd our asylums. This, in "The Practitioner's" view, consists not in a change of excitement or in hard work disguised as a game, but in that "genuine repose of which Charles James Fox, strenuous as he was in politics and in play, was thinking when he said there was nothing so pleasant as to lie under a shady tree with a book except to do so without a book."

American Association of Obstetricians and Gynecologists.

[Editorial in *Canadian Practitioner and Review*, October.]

THE Nineteenth Annual Meeting of the American Association of Obstetricians and Gynecologists was held at the Hotel Havlin, Cincinnati, September 20, 21 and 22, 1906.

There are certain incidents in connection with the organisation and subsequent history of this admirable association which are sufficiently interesting to be worthy of regard at the present time. In the year 1886 it was decided to form a Congress of representative physicians and surgeons of the United States. Preliminary invitations were sent to the various special societies asking for co-operation. The American Gynecological Society was the only one which refused to co-operate. In the official report of the Society for 1887 we find the following words: "The proposition to become part of the American Congress of Physicians and Surgeons was not adopted." The promoters of the

proposed confederation were naturally disappointed because they desired a representation of the important subjects of Obstetrics and Gynecology. As a consequence of this disappointment there was a conference of some friends of the Congress. As the result of such conference the American Association of Obstetricians and Gynecologists was organized, not in opposition to any other society, but rather in the interest of the new Congress. After the organization was fairly completed a formal application for admission was sent to the Congress. In the meantime, however, a change had come over the society which had formerly opposed the proposed Congress. We were not told whether this marvelous change was brought about in consequence of the organization of the new society; but it was certainly a singular coincidence that the applications from the old Gynecological Society and the new Association of Obstetricians and Gynecologists for admission to the Congress were practically made at the same time. After some deliberation by the executive authorities of the Congress it was decided that the society which had shown pronounced hostility to the Congress up to the time of its sudden conversion should be received, and the new organization which had been formed to assist the confederation in a serious emergency should be put on trial for a couple of years. In accordance with this remarkable decision the following resolution was passed: "Resolved that it is the sense of this Executive Committee that they will not consider the application of any society which has not held at least two annual meetings."

The new association entered into its period of probation with feelings of both surprise and disappointment, but with hopes that its work would be judged on its merits, and duly recognized at the proper time. After the second annual meeting the volumes of the transactions for two years were duly filed. After the third meeting, which was held in Philadelphia, twelve copies of each volume of transactions were asked for. This meeting was so successful from every point of view that it was supposed the perusal of the transactions would strengthen any favorable impressions which had been created by the former two. The delay was to some extent embarrassing because the association was unable to announce definitely the time and place of the fourth meeting. The third volume was completed as soon as possible, and the thirty-six books were forwarded to the committee of the Congress. When all the evidence was received the committee did not arrive at a conclusion suddenly or rashly; they took ample time for deliberation, and while they were deliberating the new Association was waiting. After about seven months the Executive Committee of the Congress of American Physicians

and Surgeons held a meeting in Philadelphia and shortly afterward sent an official intimation to the new society, stating that it would not be admitted to the Congress.

This is a brief but plain statement of one of the most extraordinary transactions known to medical history in North America. Why was the new association accorded such treatment? This question was asked by the president of this association fifteen years ago, and has not yet been answered. There was at that time a rumor in the air, that the general argument used against the new association was that it really represented nothing more than a duplication of the work of other sections, and for that reason should not be admitted.

This statement of the position is taken from the address of the president of 1891. With reference to the "duplication of the work of other sections," the president spoke as follows: "I have nothing to do with such an argument, and care not whether it be considered good, bad or indifferent. I shall remove the necessity of using it by saying that we concede that the Congress had a perfect right to refuse to admit us if its members thought fit. We insist, however, that it had no right to subject us to humiliation such as this. It had no right to place us on probation for an extended period, and then absolutely ignore the essence of the implied contract between them and us. The resolution of the Congress required certain things from us. We have fulfilled those requirements in every part. We actually came into existence in the interests of the Congress. We have supported it loyally in every particular. We have shown no particle of antagonism to any of its sections; we have patiently submitted to much inconvenience through the delay in sending its singular ultimatum. Is it possible that the majority of the members of that great organisation will feel proud of the actions of their Executive? I have considered the matter in all its aspects, and I cannot conceive how the members of the Congress can reasonably defend the methods of their committee."

The president then spoke as follows respecting the future prospects of the association: "Well, gentlemen, what are we to do now? It gives me unbounded pleasure to assure you that our Executive Council holds no divided opinions. The necessities of the case compel us to bid the Congress a sad farewell, but in doing so we indulge in the hope that we may be permitted to continue our existence, which we have found exceedingly pleasant, as well as extremely profitable. Our association is alive today, it is going to live, it is going to thrive, it is going to do a great work on this vast continent. I say this in no boasting spirit. I desire to assume no air of bravado. I feel fully impressed with

the responsibility I assume when I say that we have a grand future before us. I, who have done so little for you, can express myself with greater freedom than can others who have borne so nobly the burden of organising this magnificent society. I have witnessed the efforts of our founders with profound admiration. I have watched their zeal, their devotion, their untiring energy, with a feeling of wonder. I have viewed their boundless enthusiasm, their wondrous capacities for work, and their unselfish devotion to each other and our common cause with perfect delight. In addition it gives me great pleasure to refer to the dignified bearing of our councillors under somewhat trying circumstances. I know of no act on our part that will ever bring a blush of shame to any of our members. It appears to me that our prospects were never brighter than they are today. The object of our association, "the cultivation and promotion of knowledge in whatever relates to abdominal surgery, obstetrics and gynecology," is ever kept in view by one and all, and the results in three short years, the evidence of which may be found in the three volumes of our transactions, will inspire us with confidence and fill us with hope in the future.

"Let it be our duty as well as our pleasure to worthily continue the work which has been so auspiciously begun. Let envy, hatred and all uncharitableness toward other societies be ever kept far from us. Let us forget the indignities which have been heaped upon us. Let our memories of the past pertaining to our own work ever remain as pleasant as they are to-day."

Has the society realised the somewhat lofty expectations thus expressed? It would seem not unprofitable to consider some of the features of the meeting held at Cincinnati. One noticed very soon that the "old guard," the founders, are still on deck and ever ready for action. Among the founders present were Potter, Price, Carstens, Ill, McMurtry, Reed, Taylor, Miller and Werder. The able and active secretary has a genius for organisation and executive work, and looks quite as young as he did fifteen years ago. McMurtry, Reed, Price, and Carstens show no signs of getting old, they are as vigorous, keen and alert in debate as ever. Among others present were a number who joined shortly after the organisation of the society and are still active members, such as Ross, Hall, Longyear, Murphy, Morris, Ricketts, Zinke, Hayd.

We learn that others of the founders and members had expected to be present, but were prevented by unforeseen circumstances. There is also much new and young blood. To one attending the session of the first forenoon there appeared in the chair a boyish looking fellow with a clean-cut man's face. Who

is that? He is the president, John Young Brown, a Kentucky boy, born in Louisville, a son of one of Kentucky's ablest Governors, now one of the leading surgeons of St. Louis. After a time a well groomed boy with an intelligent man's face takes the chair. Who is that? He is another Kentucky boy, now in New York, one of the vice-presidents. These men presided with a grace and dignity that was altogether admirable. The association has shown much wisdom in holding out the glad hand to bright young surgeons and obstetricians, and bringing them into the fold.

The meeting lasted three days of two sessions each, morning and afternoon. The attendance was large, the room being filled most of the time. It is impossible to give a condensed report in the space at our disposal which would give any adequate conception of the character of the papers and the discussions. Some of the papers were far above the average, and some of the discussions were extremely good, and were listened to with breathless interest by those present. There was a general consensus of opinion that the meeting was one of the best that the association has ever known. One may go, perhaps, a little further, and say, without any fear of contradiction on the part of those in attendance, that it was one of the best medical meetings ever held in North America.

One cannot speak too highly of the work done by the Committee of Arrangements, of which Dr. Bonifield was chairman and Dr. Tate was secretary. One can also positively state that the unbounded and generous hospitality of the resident fellows will ever be remembered by those who had the privilege of attending this great meeting in Cincinnati.

In conclusion I may answer the question as to "lofty expectations" by saying that, although I feared that the enthusiasm of the president of fifteen years ago was causing him to soar a little too high, I now think, after attending this meeting, that the results have fully justified his statement: 'The association is alive to-day, it is going to live, it is going to thrive, it is going to do great work on this continent.'

ADAM H. WRIGHT.

PERSONAL.

DR. JOHN MCGAW WOODBURY, late Major and Chief Surgeon United States Volunteers, who since the war with Spain, or for a good portion of the time, has been Commissioner of Street Cleaning in the city of New York, has resigned that office because he would not permit his department to be debauched by politics.

Dr. Woodbury is easily the best head of the street cleaning department New York has ever employed,—a statement that may be made without disparagement to any of his predecessors,—and it is to be regretted that he must be sacrificed to the clamor of the political machine.

DR. W. E. FITCH, editor of *Gaillard's Southern Medicine*, has removed from Savannah, Ga., to New York, his address being at 21 West 97th Street, where he will continue his editorial and professional work.

DR. ROSWELL PARK, of Buffalo, has been elected to fellowship in the Association of French Surgeons. He is the fourth member, according to the *Buffalo Express*, to be elected to that society in the United States.

BRIGADIER GENERAL ROBERT M. O'REILLY, M.D., Surgeon General of the United States Army for the past four years, was re-appointed to that office September 7, 1906, that being the date of the expiration of his first term of service as the head of the medical department of the army. General O'Reilly will reach the age for retirement in 1909, hence will have more than two years to serve in his present capacity.

DR. H. R. GAYLORD, of Buffalo, fractured his leg recently in an automobile accident, for which he is under treatment in a hospital at Detroit.

DR. WISNER R. TOWNSEND, of New York, Secretary of the Medical Society of the State of New York, spent the day in Buffalo, October 8, 1906, and was present in the evening at the meeting of the Medical Society of the County of Erie. He made some felicitous remarks relating to the work of amalgamation of the two state organisations and their constituent county societies. Erie county was the last to complete the affiliation.

MAJOR PAUL F. STRAUB, formerly surgeon of the 36th U. S. Volunteer Infantry, while on duty with the regiment December 21, 1899, at Alos-Zambales, Island of Luzon, P. I., carried a wounded soldier to a place of safety in the face of the enemy's fire. For this act of bravery he was commended at the time by General J. Franklin Bell and on October 6, 1906, President Roosevelt conferred upon Major Straub a medal of honor. The ceremony took place at the White House, in the presence of a distinguished gathering, including cabinet ministers, army officers and others.

OBITUARY.

DR. WILLIAM JASPER PACKWOOD, of Buffalo, died suddenly at his home September 24, 1906, aged 54 years. He graduated at the University of Buffalo in 1876 and had been engaged in the active practice of medicine in this city since that time.

DR. WILLIAM K. OTIS, of New York, a graduate of the College of Physicians and Surgeons in 1885, died at his home after a short illness of pneumonia, September 22, 1906, aged 36 years. He was a son of Dr. Fessenden N. Otis and was following the general line of practice pursued by his distinguished father, and in which he himself was achieving fame. He was a member of many local and other societies and was professor of genitourinary diseases at the New York School of Clinical Medicine. He also had service in several hospitals.

SOCIETY MEETINGS.

THE Roswell Park Medical Club of Buffalo at its recent annual meeting elected the following-named officers for the ensuing year: president, Arthur G. Bennett; vice-president, Prescott LeBreton; secretary-treasurer, George F. Cott.

THE Homeopathic Medical Society of the State of New York held its semiannual meeting at Rochester, October 16, 1906, under the presidency of Dr. Newton W. Collins, of that city. The Western New York Homeopathic Medical Society held its regular quarterly meeting at the same time and conjointly with the state society.

THE Buffalo Academy of Medicine at its regular meeting held September 25, 1906, elected the following-named physicians, all residing in Buffalo, to membership:

Drs. Clifford R. Orr, Hyatt Regester, George U. McMichael, Charles A. Wall, Bernard Cohen, Nelson W. Wilson, Arthur Eisbein, Charles P. Eller, John S. McFarland, Roland O. Meisenbach, E. A. Southall, Frank H. Ransom, Jr., Frederick J. Parmenter, William B. May, Charles E. Abbott, A. E. Sohmer, J. B. Young, James E. King, Edwin R. Gould, John D. Bonnar, H. B. Brownell, J. W. Fitzgerald, Thomas H. McKee, Albert

J. Harris, Frederick Zingsheim, James P. Barr, James J. McFadden, John D. Howland, L. E. Villiaume, Frank A. Harrington, Hugh McIntyre, James H. Lewis, Abram L. Weil, Robert F. Sheehan, Jr., Albert W. Palmer, Alexander Allen, and William C. Lewin.

This increases the roll of the Academy to about two hundred and fifty members.

The Academy held meetings during the month of October as follows:

Section on Surgery.—Tuesday, October 2, 1906, at 8:30 P. M.

Program: (a) Results of some intracranial operations with exhibitions of cases, George F. Cott; (b) Chronic urethritis and an improved method of applying medication to the urethra, James A. Gardner.

Section on Medicine.—Tuesday, October 9, 1906, at 8:30

P. M. Program: (a) An important factor in the causation and treatment of many so-called functional disorders, Carl G. Leo-Wolf, Niagara Falls, N. Y.; (b) The differential diagnosis of the so-called rheumatoid diseases, Roland O. Meisenbach.

Section on Obstetrics and Gynecology.—Tuesday, October 23,

1906, at 8:30 P. M. Program: (a) Some further observations on why minor gynecological operations fail to give results, Sigmund Goldberg; (b) Gonorrhea in the pregnant female, Cornelius J. Carr.

COLLEGE AND HOSPITAL NOTES.

THE UNITED STATES MILITARY HOSPITAL, at the Presidio, San Francisco, was destroyed by fire on the evening of October 13, 1906. The building was crowded with patients at the time, some of whom were critically ill, but all were removed in safety, not a single casualty being reported. The fire was due to the explosion of a gasoline tank in the rear of the building, from which the flames spread with alarming rapidity. The men of the Twentieth Infantry and four troops of the Fourth Cavalry stationed at the Presidio responded speedily to the call and through their efforts the fire was limited to the building where it started. The structure was comparatively new and cost about \$50,000. The loss will be especially felt at this time, hospital accommodations in San Francisco being limited, because of the earthquake last spring.

BOOKS AND AUTHORS.

The Practice of Gynecology, in original contributions by American authors, edited by **J. Wesley Bovée**, M.D., Professor of Gynecology in George Washington University, Washington, D. C. In one octavo volume, containing 838 pages, with 382 engravings and 60 full page plates in colors and mono-chrome. Lea Brothers & Company, Philadelphia and New York. 1906. (Cloth, \$6.00, leather, \$7.00, half morocco, \$8.00, net).

The name of this work has been well chosen. "The Practice of Gynecology" is a term that properly applies to it and is much better than other somewhat worn expressions such as "textbook," "treatise," and the like. Moreover, it is of broader scope than textbook or treatise in general, since it includes in its domain not only a discussion of the diseases of the generative organs of woman, but also maladies of the urinary system and rectum. Furthermore, it is one of a series intended to cover the fields of gynecology, obstetrics, and pediatrics, to be known as the Practitioner's Library.

The work is encyclopedic in character, the contributors being seven in number, including the editor. Dr. Bovée has won a place for himself among the foremost gynecologists of the country, and also has demonstrated his ability as a writer through the numerous contributions he has made to gynecology, medical and surgical, during the past decade. In the selection of his coadjutors he has shown wise discrimination, all being men of distinction in the branch of medicine they have chosen as a specialty, some, indeed, being conspicuously eminent.

The examination of the pelvic contents forms the subject of the opening chapter, written by Dr. X. O. Werder, of Pittsburg, who is one of the most accomplished of the younger middle-aged men. He is an operator of great skill, and his judgment is superb. He speaks of what he knows to be correct from personal experience. He also writes the chapter on the technic of abdominal operations, as well as the one on extrauterine pregnancy. The three contributions of Dr. Werder could scarcely be excelled in sound teaching, practical value, or conciseness in expression. Dr. Bovée, the editor, contributes the second chapter, the subject of which is the developmental anomalies of the female generative organs, which is elaborately illustrated. He also contributes six other chapters, the titles of which are sterility, diseases of the rectum and anus, abnormal conditions of the urinary tract and surgical conditions of the kidney, surgical conditions of the ureter, affections of the bladder, and the final chapter, which deals with affections of the urethra. These topics all are important and have been presented with scientific skill.

Dr. J. Riddle Goffe, of New York, contributes chapters with titles as follows: menstruation, displacements of the uterus, the vaginal method of operating, and the after-treatment and complications of abdominal operations. Dr. George H. Noble con-

tributes chapters on fecal fistulæ connecting with the female generative organs, urinary fistulæ connecting with the female generative organs, lacerations of the perineum, and diseases and injuries of the vulva and vagina. The subjects of the chapters contributed by Dr. G. Brown Miller, of Washington, are inflammation of the uterus, lacerations of the cervix and subinvolution and hyperinvolution of the uterus, inversion of the uterus, fibromata of the uterus, including their treatment, and malignant tumors of the uterus.

The anatomy of the fallopian tubes and ovaries, diseases of the tubes, and extrauterine pregnancy form the subject of one chapter, and diseases of the ovary the topic of another, written by Dr. Benjamin R. Schenck, of Detroit, while three chapters on the infections of the tubes and ovaries are presented by Dr. Thomas J. Watkins, of Chicago. It will be observed from this exhibit of the subjects dealt with by the several contributors that every essential in the domain of gynecology is covered, and that, too, by men amply qualified to discuss the topics which they have been chosen to handle.

In summing up we must not fail to mention the illustrations, many of which are original, some are superb, and all are excellent, giving a graphic description of the text that is always appreciated by the careful reader. Finally, the book by and large is a most gratifying exposition of the present status of gynecology, which cannot fail to meet the wants of students and practitioners of medicine.

Reference Handbook of the Diseases of Children. For Students and Practitioners. By **Professor Ferdinand Frühwald**, of Vienna. Edited, with additions, by **Thompson S. Westcott**, M.D., Associate Professor of Diseases of Children in the University of Pennsylvania. Octavo, 553 pages, with 176 illustrations. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$4.50 net; Half Morocco, \$5.50 net).

The author of this treatise had been engaged in teaching more than twenty years before he attempted to bring out a manual on the subject of pediatrics. Professor Frühwald experienced the lack of a compact teaching manual, hence set to work to supply one. Those who are familiar with the book in the original German have given favorable indorsement of it and now the American profession is given an opportunity to pass judgment upon its

The alphabetical classification has been followed, as affording the most practical form for a reference book; important pathologic findings have been but lightly referred to; but symptomatology has been dealt with comprehensively, thus opening the way to more assured diagnosis. In the line of treatment only the most approved measures are adopted, while the most recent achievements in therapeutics are described at length. Due attention is given, of course, to prophylactic, hygienic, and dietetic procedures in relation to each disease while it is under consideration.

Frühwald is a believer in the use of pictorial representation as an aid to the recognition and understanding of many diseases and, therefore, has taken pains to introduce illustrations of a considerable number of the rarer conditions met with in practice. These are made from photographs, sketches from nature, or diagrammatic drawings, nearly all of which are taken from his own clinic at the Vienna Poliklinik. It is of interest to note that, by special arrangement with the foreign publisher, Mr. Franz Deuticke, of Leipzig and Vienna, the illustrations in this edition are, for the most part, printed from the original plates used in the German edition, which insures accuracy. A few extra plates from accredited American sources are added,—all of which testify to the enterprise of the American editor and the publishers:

It is evident, as a concluding remark, that this reference handbook becomes at once a distinct addition to the literary armament of the student, for whom it is particularly intended.

The Practical Medicine Series of Year Books. Ten volumes. Series of 1906. Issued under the general editorial charge of **Gustavus P. Head**, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. I. General Medicine, edited by **Frank Billings** and **J. H. Salisbury**. Chicago: The Year Book Publishers. 1906. (Price, \$1.25) Vol. II. General Surgery, edited by **John B. Murphy**. (Price, \$2.00; entire series, \$10.00).

I. This number is taken up with the consideration of diseases of the respiratory organs, diseases of the circulatory organs, diseases of the blood and bloodmaking organs, general infectious diseases, metabolic diseases, diseases of the ductless glands, rheumatoid diseases, and diseases of the kidneys. Something over one hundred pages are set apart to the tuberculosis problem, which is one of the best condensations on that subject we have seen. The text and other fresh air illustrations are instructive and indicate progress in this form of managing the consumptive. The suggestion by Peters, that superannuated trolley cars can be utilised to advantage by tuberculosis sufferers, is a good one and should be put into practical use. The remainder of the book is replete with interest and information for the practical physician.

II. The second volume of the 1906 series, devoted to general surgery, is edited by John B. Murphy. One always finds something of great interest when Murphy prepares the text. The surgery of the year has not been more compactly or usefully put before the profession than in this book. Abdominal surgery in general, the surgery of the stomach and intestines in particular, hernia, the surgery of the rectum, of the kidney, of the gall-bladder,—in short, the surgery of all the organs of the abdomen and pelvis is reported with sufficient detail to afford ample information on each topic. The abstracts are made with rare discrimination and many of them are elaborately illustrated. It is by far the best digest of the surgery of the year that has been

sent out to physicians, as we have already intimated, and deserves well of every practitioner who expects to be prepared to meet surgical conditions.

Diseases of the Nervous System resulting from Accident and Injury.

By **Pearce Bailey**, A.M., M.D., Clinical Lecturer in Neurology, Columbia University, New York; Consulting neurologist to Roosevelt, Saint Luke's, and Manhattan State Hospitals. Octavo, 628 pages. New York and London: D. Appleton and Company. 1906. (Price: Cloth, \$???)

The author has rewritten and revised his former work on this subject and the result is a book which by reason of its completeness will prove of value to surgeons and physicians, irrespective of their specialties. After considering the organic effects of injury to the nervous system about which there can be no controversy, he passes to the discussion of the late effects of injury.

Trauma as a factor in the causation of paresis and locomotor ataxia receives such judicial treatment that it deserves special notice. Can a person who has never had syphilis or marked hereditary predisposition develop general paresis as the direct consequence of injury to the head? In answer to this he quotes Pettit of the Manhattan State Hospital, "from a study of 2,000 clinical histories, he is forced to believe that head injury is not to be regarded as a sole cause of the disease." He sums up after a review of the views of a large number of the cases reported the world over, that in his opinion "the conclusion is unavoidable that if ever trauma is the sole cause of general paresis, such a causal relationship is extremely unusual and difficult of proof, and is to be accepted only after scrupulous inquiries have eliminated all the many opportunities for error."

The evidence of the traumatic origin of tabes is the Scotch verdict, "not proven." We consider that as a reference book and guide in the medico-legal practice which is liable to come to all physicians, this book will be a great favorite. We know of no book so complete on the subject.

J. W. P.

A Textbook of Materia Medica, Therapeutics, and Pharmacology.

By **George F. Butler**, Ph.G., M.D., Associate Professor of Therapeutics in the College of Physicians and Surgeons, Chicago. Fifth edition, thoroughly revised by **Smith Ely Jelliffe**, M.D., Ph.D., Professor of Pharmacology and Instructor in Materia Medica and Therapeutics in Columbia University (College of Physicians and Surgeons), New York. Octavo of 694 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$4.00 net; Half Morocco, \$5.00 net).

Since the last revision of this work, advances along its lines have wrought changes that render necessary a remodelling of most of the old forms. Professor Jelliffe has incorporated in this edition whatever there remained of value in the former, and has taken in all the recent studies in physiological chemistry, pharmacology, and the newer materia medica. It being intended as a

book for students and practitioners, rather than for experimental workers in pharmacology, everything relating to the practical side of the topics dealt with has been made to take first place, to the exclusion of much that was found either obsolete or of only secondary importance.

This not only has changed the general arrangement of the book, but has served to reduce its size without diminishing its value; on the other hand, it has materially increased its usefulness. As now presented it takes a place in the front rank of textbooks on materia medica, therapeutics, and pharmacology, and is likely to meet the favor of medical schools as a working guide for laboratory pupils.

Diseases of the Eye. A handbook of Ophthalmic Practice. By **G. E. DeSchweinitz**, M.D., Professor of Ophthalmology in the University of Pennsylvania. Fifth edition, revised and enlarged. Octavo of 894 pages, 313 text-cuts and 6 chromo-lithographic plates. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$5.00 net; Half Morocco, \$6.00 net).

The distinction this author has attained in the field of ophthalmology has served to make his treatise so popular that frequent editions are demanded. This fact enables him to keep the material fresh and abreast of the progress making in this branch of medical science. In the present edition new chapters have been added on the following subjects: *x*-ray treatment of epithelioma, xeroderma pigmentosum; purulent conjunctivitis of young girls; jequiritol and jequiritol serum; *x*-ray treatment of trachoma; infected marginal ulcer; keratitis punctata syphilitica; uveitis and its varieties; eye-ground lesions of hereditary syphilis; macular atrophy of the retina; Worth's amblyoscope; stovain, alypin; Motais's operation for ptosis; Kuhnt-Muller's operation for ectropion; Haab's method for foreign bodies; and Sweet's *x*-ray method of localising foreign bodies. Other chapters have been rewritten. The illustrations are numerous and effective as aids to a completer understanding of the text. It is one of the foremost books for a beginner, or for a practitioner who desires to take up the study of ophthalmology.

The Examination of the Function of the Intestines by means of the Test-Diet. Its application in Medical Practice and its Diagnostic and Therapeutic value. By **Prof. Dr. Adolf Schmidt**, Physician-in-chief of the City Hospital Friedrichstadt in Dresden. Authorised Translation from the latest German Edition, by **Charles D. Aaron**, M.D., Professor of Diseases of the Stomach and Intestines in the Detroit Post-Graduate School of Medicine; Clinical Professor of Gastro-enterology in the Detroit College of Medicine; Consulting Gastro-enterologist to Harper Hospital, etc. With a frontspiece plate in colors. Crown Octavo, 91 pages. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia. (Price: extra cloth, \$1.00 net).

The object of this brochure is to set forth the result of investigations, extending through eight years, into the function of

the intestine, with the desire to institute an examination that could be carried out in practice, similar to the usual examinations of the stomach contents. The author confesses that he has not quite succeeded in reaching his goal; nevertheless, he has accomplished much in that direction, and has presented material that cannot fail to be of service to every practitioner dealing with intestinal diseases.

Dr. Aaron has given us a translation that preserves the original meaning of the author and, besides, makes smooth reading,—two very important points in rendering the German into English.

Progressive Medicine, Vol. VIII, No. 2; June 1906. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by **Hobart Amory Hare, M.D.**, Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 368 pages, 31 illustrations. Lea Brothers & Co., Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00).

This number, which constitutes the second one of the eighth volume of the excellent periodical called *Progressive Medicine*, contains articles contributed by several men of conspicuous prominence in the medical profession. The titles are, hernia, by William B. Coley; surgery of the abdomen exclusive of hernia, by Edward Milton Foote; gynecology, by John G. Clark; diseases of the blood,—diathetic and metabolic diseases,—diseases of the spleen, thyroid gland, and lymphatic system, by Alfred Stengel; and ophthalmology, by Edward Jackson. Dr. Coley's article is well illustrated and Dr. Foote's is fairly so, but the others are deficient in this respect. However, the text is admirable and makes this number among the best yet issued.

Transactions of the American Gynecological Society. Volume 30, for the year 1905. **J. Riddle Goffe, M.D.**, secretary. Philadelphia: William J. Dornan, printer. 1905.

The distinguishing feature of the meeting which created the material for this volume is that it was held at Niagara Falls. It is surprising that so much hard work could be done as was actually accomplished in that city of rest, and in sight of one of nature's great wonders.

The president, Dr. E. C. Dudley, of Chicago, in the introductory remarks to his address, took occasion to remind the Fellows, and indirectly the professional world, that gynecology is not dead as a specialty, that it has not "passed," and that the general surgeon has not absorbed it. The body of the address was taken up with a discussion of a phase of plastic surgery,—the incontinence of urine in women. Dr. Dudley described an operation which he devised for the relief of that condition, and which is admirably illustrated.

The entire volume is replete with interesting material, and is a credit to this excellent society.

Nursing in the Acute Infectious Fevers. By George B. Paul, M.D., Assistant Visiting Physician and Adjunct Radiographer to the Samaritan Hospital, Troy, N. Y. 12mo. volume of 200 pages, illustrated. Philadelphia and London: W. B. Saunders and Company. 1906. (Price, \$1.50 net).

In this monograph will be found the essentials pertaining to nursing fever patients; indeed, it may be said that it reduces that form of nursing to a specialty. The author divides his work into three parts. The first treats of fevers in general; the second of each fever individually; the third deals with practical procedures and information necessary to the proper management of the various diseases discussed, such as antitoxins, bacteria, urine examination, poisons and their antidotes, enemata, topical applications, antiseptics, weights and measures, diet, and various other requisites pertaining to this special form of nursing. A table of the signs of the onset of the toxic effects of drugs, and one of poisons and their antidotes, add useful features to the book, which is one that every nurse should obtain and study.

The World's Anatomists. Concise Biographies of Anatomic Masters from 300 B. C. to the present time, whose names have adorned the literature of the medical profession. By G. W. H. Kemper, M.D., Professor of the History of Medicine in the Medical College of Indiana at Indianapolis. Revised and enlarged from the original serial publication in the Medical Book News. With eleven illustrations. Philadelphia: P. Blakiston's Son & Company. 1905.

The memoranda contained in this small brochure should attract the attention of every physician interested in the classics of medicine. They serve to refresh the memories of those who may have forgotten specific data, and to inform others who may not have learned them as yet. The author has done the profession a marked favor in collecting short sketches of the world's famous anatomists.

BOOKS RECEIVED.

A Textbook of Histology. By Frederick R. Bailey, M.D., Adjunct Professor of Normal Histology, Medical Department of Columbia University, New York. Second, revised edition. Illustrated. Octavo, pp. 497. New York: William Wood & Co. 1906. (Price, \$3.00).

The Medical Student's Manual of Chemistry. By R. A. Witthaus, M.D., Professor of Chemistry, Physics and Toxicology in Cornell University. Sixth edition. Octavo, pp. 820. New York: William Wood & Co. 1906. (Price, \$4.00).

Transactions of the twenty-eighth annual meeting of the American Laryngological Association held at Niagara Falls, N. Y., May 31, June 1 and 2, 1906. James E. Newcomb, M.D., secretary.

Lea's Series of Medical Epitomes. Edited by Victor C. Pederesen, M.D. *Materia Medica and Therapeutics* by Edward J. Kiepe, M.D., Adjunct Professor of Materia Medica in the Medical Depart-

ment, University of Buffalo. 12mo., pp. 265. Philadelphia and New York: Lea Brothers & Company. 1906. (Price, \$1.00).

Annual report of the Department of Health of the City of Buffalo for the year ending December 31, 1905. Walter D. Greene, M.D., Health Commissioner.

Rhythmotherapy, or a Discussion of the Physiologic Basis and Therapeutic Potency of Mechano-vital Vibration; to which is added a Dictionary of Diseases. Illustrated by Samuel S. Wallian, A.M., M.D., Chicago: Ouellette Press. 1906. (Price, \$1.50).

International Clinics. A quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology. Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A.M., M.D. Philadelphia. Volume III. Sixteenth series. 1906. Philadelphia and London: J. B. Lippincott Co. (Cloth, \$2.00).

ITEMS.

THE approach of the holiday season calls to mind the fact that physicians, equally with other persons, are interested in the proper preparation of the table delicacies and luxuries that serve to make for good cheer during the festivities. Among other things two articles are indispensable in making up for these occasions. One of these is Apollinaris Water, which is unrivalled for the table and holds its own as the "Queen" of table waters. The other is "Moet and Chandon White Seal Champagne, vintage of 1900," which is unexcelled by any sparkling wine in the market. It is proper to remark, too, that both "Apollinaris" and "Moet and Chandon" are often of value in the sick room. Whenever sparkling water or wine is indicated these are each at the top of the list in their class.

TO CHESS PLAYERS.—The Tri-state Chess Association, an organization composed of over four hundred players, most of whom reside in the Mississippi Valley, is arranging a correspondence match at chess, the Doctors vs. the Laity. It is desired to have physicians from every section of the United States engaged in this match. Therefore, every chess loving physician is urged to become a consultant in the case. The match will begin early in November; entries will be accepted until January 1, 1907. All who will play are urged to send their names and addresses to the president, with the number of games they will take on. There is no fee attached to the match. Address,

DR. VAN NUYS, President, Lorain, O.

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

DECEMBER, 1906.

No. 5

ORIGINAL COMMUNICATIONS.

The Social Evil.¹

By DENSLOW LEWIS, M. D., Chicago, Illinois.
Chairman of the Section on Hygiene and Sanitary Science of the
American Medical Association.

AN occasion like this is usually improved to offer congratulations to the new members of the craft who have served their apprenticeship and are now joyfully admitted with us to the rank of master workmen. It is also customary for some one to speak of the high ideals of the medical profession, to give perfunctory advice, and to indulge in words of eulogy and encouragement. It is certainly a glad day in any man's life when fruition comes at last as the result of honest labor.

I look back now to a day nearly thirty years ago when I was found worthy to take my place with the others, to do what I might to bind up the wounds that bleed, and above all things, by judicious endeavor, to try to learn how a wise and practical prophylaxis might limit disease and increase the usefulness and happiness of the human race. My struggles will not be yours. Honest men have worked faithfully and well for humanity and, although in many instances even their names are now forgotten, the imprint they have left on medical progress and the incentive they have given to modern thought attest the usefulness of their lives, and form a more substantial reward than title, worldly honor, or the accumulation of property. Medical science has advanced, and the new generation begins where the workers of the present leave off.

It is, I think, interesting to observe that the profession realises now more than ever that its members have other things to do than wield the knife or roll the pill. It is a happy sign of the times when medical men understand that they must study sociology, that they must appreciate economic conditions, that they must face the facts and know life as it is, and not as their wishes would have it be. A great step in advance is taken

1. Delivered by invitation at the Commencement Exercises before the Alumni Association of the Medical Department of the University of Buffalo, May 31, 1906.

when we really believe that our way, while it seems to us to be the best, is not the only way; that our creed may not be the only true creed; that our standard of right and wrong and justice and truth may be only relatively correct. Above all things it is most fortunate for humanity and most propitious for real advancement, when we begin to discern that precedent is not authority, that human judgment may err, that civilisation advances, and that our knowledge of the truth is progressive.¹

It is only of late years that we have learned all this. We have of course admitted it in a very general way, as every man who thinks must do. We have been hampered in the study of many of our most serious conditions by a false modesty and a maudlin sentimentality which prevented us from looking facts well in the face. We have thought, as at least our actions would seem to indicate, that ignorance meant innocence, and that certain conditions of our society were so deplorable and disgusting that it were shameful even to admit their existence.² And yet we knew they existed; we knew the illness, the suffering of body and the distress of mind they caused. We tried to suppress them, but they would not down. We tried to ignore them, but their effects were so manifest that we realised the folly of closing our eyes and saying we did not see. At last we have come to our senses, and our better judgment prevails. We know there must be a reason for every event and a cause for every effect. We know there must be an incentive for every action and we understand now, in a most practical manner, that our only hope of effecting radical improvement consists first of all in a true understanding of the relationship between cause and effect and in realising that a knowledge of all the facts is of the first importance.³

In this liberalising spirit of inquiry, I purpose to offer for your consideration some of the facts, as I understand them, regarding what is known as the social evil. It is, I believe, the first time in America that this topic has been the subject of an address of this kind. Education and culture cause increased responsibility. It is a happy augury of the future that intelligent men and women throughout the country wish to devote serious thought to this most momentous problem that pertains to our civilisation. Their work will bear fruit. They cannot study this great question of the ages without some practical benefit. They have taken the first step, they cast aside all prudery, they investigate with candor and deliberation this condition of our society and the direful effects that result from it, they know the folly of concealment, they wish to show the danger. The value of publicity is acknowledged.

With this preface which, if you please, may serve as an apology for my topic, if it is thought that an apology is necessary, I state that next in importance to the instinct that demands the preservation of the individual is the instinct which determines the perpetuation of the species. This is a simple thing to say and a fact which is universally acknowledged. There is nothing disgusting about this. It shows to my mind a wonderful provision for the continuance of the race. This sexual instinct is the basis of love, for without its presence the platonic affection that exists between man and woman is only friendship. This need not be a startling declaration. I do not mean that the man who loves a pure young woman wishes to take an unfair advantage of her affection for him. I do not underestimate in the young woman the value of culture, education, and refinement, but I do maintain that the beauty of face and form, given in their perfection to women only during the years when childbearing is possible, indicate that her chief mission is that of the mother and that her most exalted station is that of the wife who makes possible the home which is the cornerstone of our society.

This matter of the sexual instinct must be studied very carefully and most thoroughly. It is the impelling force in our nature. It demands satisfaction. Its consideration may not be dismissed with a shrug of the shoulders, neither is it just or wise to call it nasty. It must be remembered it means home and children and happiness. It is the noblest function of which any man or woman is capable. It is the keynote of a harmonious community. It exists and it must exist or there is no future to the race, no happiness to human life, no guarantee of safety to the commonwealth.⁴

With the age of puberty comes the awakening of the sexual instinct. It is usually more accentuated in the boy than in the girl. It makes itself evident in an unmistakable manner, and unless the child is told about it, there is danger of masturbation, unnatural practices, or premature intercourse which may prove disastrous in many ways. As the child grows older, as adult life is reached and indeed during the greater part of every healthy life, the sexual instinct exerts itself in a dominating manner which, of course, is to be expected and which we must admit is desirable when we realise that were this not the case the race would be in danger of extinction. It is due to this sexual instinct that the social evil exists. It is chiefly due to the masterful influence of this instinct in the male that prostitution is possible.

I wish here to discriminate in regard to the use of a few expressions. When we say "evil," we must realise that there is a relative meaning to the word. If it is an evil for a man to co-

habit with a public woman, it is preferable to have him do this rather than to attempt to seduce our daughters or alienate the affections of our wives. It is infinitely preferable for him to buy the goods where they are for sale than to take advantage of the ignorance, the poverty, or the credulity of the young working girl. The word prostitute has been defined as the woman who sells her body lewdly and indiscriminately for money. We sometimes hear of the male prostitute. He exists, but he is not the man who is the customer of the prostitute. He offers his services for money as she does hers, and his patrons, like himself, are often degenerates or perverts who indulge in unnatural practices.

Now what are the facts regarding prostitution as we know it? My friend, Valentine, of New York, claims that hereditary degeneration obtains, producing a reversal to primary conditions when polyandry existed.⁵ I presume that is true in some instances, but my observation teaches me that the unfortunate young girl is apt to take up this calling as a means of livelihood when all other avenues of employment are barred to her. If she has been forced to steal and has served in the reform school or bridewell, it is almost impossible for her to secure decent employment. No one wants the thief even if she be virtuous, or if extenuating circumstances exist in her case. We know the fate of the indiscreet girl who is found out. There is no forgiveness for her. We know what happens when the unmarried girl becomes pregnant. She is driven from home or from her place of employment. There is no excuse for her. If a criminal abortion is performed, the inhumanity of those she considered her friends often induces a spirit of recklessness which lands her in the house of prostitution. If she has an illegitimate child, the procuress often awaits her departure from the maternity hospital. Deserted by her seducer, unable to find employment among those who know of her and her disgrace, forsaken, destitute, and disheartened, the Salvation Army or the house of prostitution is practically her only refuge.

Prostitutes are often debauched and degraded, the vilest of women. I cannot help but remember that there was a time when each one was a pure young child. In rare instances I know the sexual instinct is so strong in a girl that she forgets her caution. In most instances I know the fault is the man's. He has insinuated himself into her affection, he has imposed upon her credulity, he has taken advantage of her ignorance or her necessity, he has not realised that in honor he should be the protector of the young girl if need be even against herself.

I speak of these things, which I know to be facts, because I am indignant when I hear so much talk about these depraved

women. I know they are often depraved, but I know men make them so. If man did not insist, if our civilisation, our education, and our religion could teach him self-control, the prostitute would not be. So it is as unjust as it is cruel for us to condemn these women for doing what men make them do. If prostitution is to cease let us stop the demand by teaching our men and boys the possibility of continence, the advisability of chastity, the dignity of virility. There will be no supply unless there is a demand.

And women must view this subject in the light of justice. When we read daily of men of prominence who are shown to be defaulters, when the life of shame of many a man of exalted station is exposed, is it not time that our women should look in pity on the girl whose necessities have made her compliant? Is it not fair that the unfortunate ones should in charity assist the unfortunate? Who can tell what might have been the outcome to any woman under similar conditions?

It is safe to assert that prostitution will not cease during our lifetime or for several generations to come. It will, in my opinion, last until educational methods teach the man his duty and economic conditions render the girl self-supporting. In the meantime the prostitute exists, we have seen how and why, and the question is, "What shall we do with her?" I answer first, she is a woman and a citizen. She can hold property, she can do theoretically at least, very much as other women. Knowing how she has been forced into her present life and knowing further her ultimate fate in a few short years, I can not bring myself to spit upon her, to push her deeper down into the mire. I realise also, under our present imperfect and incomplete system of civilisation, the great good that she really does in every community. This perhaps seems incredible,—almost incomprehensible. But note what Lecky, the great English moralist, says of the prostitute: "The supreme type of vice, she is ultimately the most efficient guardian of virtue. But for her happy homes would be polluted, abortion and infanticide would increase, unnatural and most harmful practices would abound."⁶

Here are startling thoughts unless we have studied the subject carefully and in the spirit of justice. To most women the prostitute seems so degraded that her presence even in the public street is resented. And yet she may indirectly have saved the daughter from ruin; she may have saved the wife from divorce or abandonment. She is unfortunate, a derelict on life's ocean. Save her if you can, give her due credit for what good she does, remember she is what she is, because some man has made her so, remember she is after all a woman.

The police regulations that apply to prostitution, like most municipal regulations, are a compromise. We wish there were

no prostitutes, but we know there must be until the demand for them shall cease, when our educational measures become truly effective and our religion becomes an active force in daily life instead of chiefly a belief in a creed. Under existing conditions it would seem to be wise not to try to crush out prostitution, for history shows such an attempt is impossible of execution, and our knowledge of human nature would seem to indicate that there are, after all, more serious evils to be feared. Common sense apparently indicates that the most judicious thing to do is to prevent outrage and crime and to try to save the young. For this reason segregation is usually advisable. The man in quest of the prostitute will find her. There is no reason why in so doing he should be exposed to theft or assault. The prostitute has the right to live but she may not solicit nor become, or maintain a nuisance. It is better to have her live in a district of her own than in the neighborhood of our schools or our homes. Our boys will find her if they determine to do so, but it is better for them to hunt her out knowingly and willingly than to be lured to her abode by a street acquaintance, or meet her by chance late at night when perhaps undue indulgence in alcohol may have impaired the judgment. In a word, she should be where she may be found, but she should not herself do the seeking.

Investigation in New York and other large cities has shown a deplorable state of affairs in relation to the police and their methods. The frequent raids, the cry of graft, the exposure of connivance are humiliating to our sense of decency and serve to demonstrate the need of a true surveillance which shall not be an unjust oppression. Nuisances must be abated, crime must be suppressed, order must be maintained. There is, however, no justification for bribery, blackmail, or unfair intimidation. Within her own limits, the prostitute has the right to live. Ostentatious solicitation should be prohibited, obscenity should be checked, decorum should be demanded. The outrages committed by the police in the name of the law are not justifiable and are especially reprehensible when the victims are unfortunate women of this class.

There is another phase to this question which is of special interest to medical men and which has forced the attention of the public to a practical consideration of prostitution. I refer to the venereal diseases. Modern appreciation of these diseases shows that potentially they are far-reaching in their effects and most disastrous in their results. They cause a greater morbidity among adults than all other diseases combined. And then there is this sad fact which must be stated. The innocent becomes infected, often unwittingly, through ignorance. The

young wife becomes an invalid for life or a candidate for the operating table. The babe is born blind; it is born sickly or deformed and often succumbs early in infancy. Young children acquire these diseases innocently. The danger is imminent and threatens everyone.

Now I maintain that health is of the first importance and that all disease is to be prevented as far as possible. There are men and women who think otherwise in reference to the venereal diseases. They claim that the man who cohabits with a prostitute gets no more than his deserts if he is infected. If this statement is true, our duty is plain. We must encourage the spread of venereal disease to make sure that no transgressor fails to receive his just punishment. The most distressing circumstance in this connection is the infection of the innocent. If the man deserves what he gets, surely his young wife and his children should not suffer. It is this dissemination of the disease among the innocent, perhaps more than any other single element in its consideration, that has induced, within the past few years, a concerted effort in Germany, France, and other European countries which has for its object the restriction of the venereal diseases.

In the United States this effort took form in February, 1905, when there was organized the American Society of Sanitary and Moral Prophylaxis. In the opening address the president of the society, Dr. Prince A. Morrow, of New York, said; "A free discussion is, of course, an essential preliminary to any well-considered action, especially when such action proposes to deal with what is confessedly the most difficult of all problems of social hygiene."⁷ This seems reasonable and yet the student of the subject knows what a great advance even in professional opinion is indicated by the acceptance of this statement. There has been in the past such an intense feeling of loathing against prostitution and venereal diseases that the mere mention of them even in medical societies was considered outrageous. It was said we must not "recognise" vice, traffic with crime, temporise with sin, or consort with the Lords of Hell—whatever that may be. Now, I hold that recognition does not mean sanction or legal endorsement. We recognise murder, arson, poverty, imbecility, degeneracy, and other distressing conditions of modern society; we do not approve of any of them. We wish they did not exist, but it is absurd to deny their existence.

I will not now go into detail regarding the different attempts that have been made in the past to crush out prostitution and venereal disease. Occasionally the methods used have been effectual for a time, but in general it may be said that the results ob-

tained have not been satisfactory. For that reason the attempt now being made is along different lines. It consists first of all in the education of the people which is a matter of the highest importance. Wherever men are thrown together, in factories, in church clubs, in labor unions, in secret society lodges, the teacher will go forth to tell the truth. In France a dramatist named Brieux has produced plays which show how venereal disease may extend. In all European countries pamphlets are being written and circulated broadcast. Our American Society has just issued its first educational pamphlet, and others will follow. In addition to diffusing the knowledge we already possess will come the very earnest study of all economic and medico-sociologic factors in the etiology of the subject. There will come also, as is now advocated in France, increased provision for the gratuitous treatment of venereal diseases as well as a refuge for the infected woman, so that in her effort to live she may not further convey the disease.

In a word, common sense will prevail. There will be no spasmodic attempt to crush out prostitution, no mock heroics which indicate the Pharisee. There will be a true humanitarianism and a real Christianity. There will be work done, honest and effective work. It is not enough to say, as does my distinguished friend, Howard Kelly, that the answer to this momentous question is "definite faith in God, a faith which leans upon Him at all times for grace and strength to do that which we otherwise could not do." Neither is it good sense to sum up the whole matter as he has done recently, as follows: "My only hope lies solely in God and in prevailing on men to look to Him for grace and strength to do that which they cannot of themselves accomplish."⁸

In no way would I belittle the value of religion, for without hope in God any work of man is of little avail. Across the ages the great figure of the Nazarene stands forth as the exponent of the doctrine of love which makes all men brothers. Let us have faith and hope in God, but let us do our work unfalteringly. Let us give even the prostitute a square deal, save her if we can, but at all events prevent her from spreading disease. Let us be honest and sincere, look facts in the face, reason, investigate, and above all things tell what we already know. Thus, in my opinion, may we practically and definitely help to solve this momentous problem.

These few thoughts relating to the social evil I beg to submit to you. I do not pretend to say I am absolutely right but at least I think I am right and my statements are not made carelessly or without consideration and observation. I know the old methods are ineffectual and everybody who knows about them

admits this. The profession now starts anew to dispel the darkness of ignorance by bearing aloft the light of truth. We look to a rational education as our supreme hope. We believe in a religion of deeds, a civilisation which protects the interests of the humblest citizen. We think it is possible to teach men the meaning of honor and to give women a knowledge of charity. We know it is unjust to condemn the young girl when there has been no warning of the danger that confronts her. We believe in adequate wages for the girl so that she may live without selling herself. These elements in our civilisation must be investigated. By a persistent and intelligent effort to strike at the cause, the social evil must be controlled and venereal infection must be eradicated.

92 STATE STREET.

REFERENCES.

1. Denslow Lewis: Ignorance as a Cause of Disease and Disaster; *Ills. Med. Journ.*, Jan., 1906.
2. Denslow Lewis: The Gynecologic Consideration of the Sexual Act.
3. Denslow Lewis: Knowledge as a Factor in Venereal Prophylaxis; *Am. Journ. of Dermatology*, Feb., 1906.
4. Denslow Lewis: The Need of Publicity Regarding Venereal Diseases; *Medical Record*, 1906.
5. Denslow Lewis: The Limitation of the Venereal Diseases; *Medico-Legal Journal*, June and Sept., 1903.
6. William E. H. Lecky: The History of European Morals from Augustus to Charlemagne.
7. Prince A. Morrow: The Society of Sanitary and Moral Prophylaxis, its Objects and Aims; *American Medicine*, Feb. 25, 1905.
8. Howard A. Kelly: The Regulation of Prostitution; *Journ. Am. Med. Association*, Feb. 10, 1906.

Some Points in the Diagnosis and Treatment of Accidental Hemorrhage.¹

By ADAM H. WRIGHT, B.A., M.D., M.R.C.S., Eng.
Professor of Obstetrics, University of Toronto, Canada.

[From *American Journal of Obstetrics*, November 1906.]

ACCIDENTAL hemorrhage is one of the most complex subjects in obstetrics, and one of the causes of its complexity is the word hemorrhage. In medicine and surgery we consider certain hemorrhages, such, for instance, as one in the brain or pancreas, dangerous because of the resulting clots which act as foreign bodies, and by irritating pressure, produce serious effects. In obstetrics most practitioners consider that the serious condition in all forms of what is technically known as accidental hemorrhage, is loss of blood.

1. Read at the nineteenth annual meeting of the American Association of Obstetricians and Gynecologists, held at Cincinnati, September 20-22, 1906.

My aim in this paper is to refer simply to certain points in connection with accidental hemorrhage, without any attempt to treat the subject in a complete or systematic manner. In a paper on the concealed variety read at the meeting of the British Medical Association last August, I reported a case of the concealed form. I may say that four cases of concealed accidental hemorrhage have come under my observation.

As these cases are exceedingly rare, I take the liberty of repeating one report of great interest, because I had the opportunity of watching the patient carefully from the onset of the serious symptoms until the time of her complete recovery.

Patient, aged 29, II-para, when seven months advanced in pregnancy was suddenly seized with abdominal pain while driving. Went home (only a short distance) as soon as possible. Went upstairs intending to go to bed, collapsed while undressing. I saw her in about twenty minutes and found her cold and weak, pale, with rapid pulse, and suffering intensely from "tearing" pains over the abdomen. Gave her large doses of morphine and ordinary treatment for shock. The symptoms, although very alarming for about two hours, subsided. Concealed hemorrhage suspected at first, but doubted on following day. Four days afterward an uneventful labor resulted in the expulsion of a dead fetus. The placenta showed evidence of being nearly half detached. The shock was evidently due to the tearing pains caused by the sudden impingement on the uterine wall, and not at all to the loss of blood, which did not amount to more than a pint (I think less than a pint). The clot thus produced, although comparatively small, had acted as a foreign body, and produced a surgical traumatism which nearly caused the death of the patient.

In considering the whole subject of accidental hemorrhage, several differences of opinion are prevalent, both as to diagnosis and treatment. The following procedures are conspicuous in this regard,—rupture of the membranes, plugging the vagina, accouchement forcé, and Cesarean section. In this paper vaginal Cesarean section will not be considered as a variety of accouchement forcé. Why is there so much divergence of opinion? In the first place, probably because the internal concealed variety is absolutely different from the external hemorrhage as to symptoms and results, and requires entirely different treatment.

Again, all accidental hemorrhages are at first internal and concealed, and present a great variety of symptoms, such multiplicity depending on the suddenness of the gush, the amount of blood poured out, and the length of time of concealment. The blood streaming from the ruptured vessels may flow freely from the uterus at once, or may be bottled up for a varying time.

In a certain proportion of cases of accidental hemorrhage there is little or no shock, because there is little or no obstruction to the flow of blood. The important condition here is loss of blood resulting in collapse, with no tearing or agonising pains.

What is shock? We have no time now to discuss such an important subject in detail, but we recognise the fact that the surgeons of today are giving us valuable instruction as to this condition. Obstetricians have said much about shock as produced by accidental hemorrhage during the last sixty years. Many of their statements have been rather vague, but they generally indicate that shock, in connection with accidental hemorrhage, is a condition produced by loss of blood. It will simplify the matter somewhat from the standpoint of this paper to leave out of the question what is known as post-operative shock. I shall, however, give a definite meaning to the two words, shock and collapse, although it will be admitted that any distinction between these two conditions must be to a certain extent artificial.

Shock will be considered a condition which is produced more or less suddenly by a serious traumatism, or surgical injury, similar, for instance, to that produced by the wheel of a railroad car passing over and crushing a limb.

Collapse will be considered a condition caused by extreme exhaustion, especially that induced by severe hemorrhage, and depending on the amount of blood lost. It is, of course, difficult in many cases to differentiate between these two conditions. It may be that we have shock from traumatism and collapse from hemorrhage to an equal degree in certain cases of concealed hemorrhage.

In the majority of cases of concealed hemorrhage, however, shock and not loss of blood is probably the prominent symptom or condition. The muscle of the uterine wall is generally strong enough to resist the impact of the *new body* without appreciably stretching, while the nerves suffer from the sudden pressure to such an extent that a severe storm arises, causing agonising pain, intense shock, and tetanic spasm of the uterine musculature, with a cervix "as hard as iron."

There is another entirely different class of cases where the uterine wall is not strong enough to offer much resistance, and as a consequence the uterine cavity enlarges greatly, allowing an escape of blood from the uterine vessels sufficient to destroy life. I have not seen, nor have I met a physician who has seen such distention of the uterus, but we must accept the evidence of such careful observers as Oldham of Guy's Hospital, and others who have recorded such cases.

It should not be difficult to recognise such a condition because the patient would steadily grow worse, the abdomen would become enlarged, the temperature would be lowered, but the pulse rate would grow more rapid.

Diagnosis.—No attempt will be made to deal fully with the important subject of diagnosis. We may consider that, in many cases of the concealed, combined internal and external, and the ordinary external varieties, diagnosis is often difficult or impossible for a time at least. The diagnosis of the concealed form is often impossible until after delivery.

In my paper of last August I referred to a very admirable discussion on accidental hemorrhage at the meeting of the British Medical Association two years ago. I can hardly agree, however, with the opinions there expressed respecting the diagnosis of the concealed form.

Sir Arthur McCann expressed the opinion that in many cases the diagnosis is impossible until after the expulsion of the placenta; but he adds: "However, once the symptoms of anemia are well marked, and are accompanied with much pain and tension or localised swelling, there is usually not much trouble about the diagnosis."

Jellett, who expresses the latest views from Dublin, tells us the symptoms of concealed hemorrhage fall under two heads: (1) "Those due to loss of blood;" (2) "those due to the accumulation of blood in the uterus." He adds that "the most prominent symptom in the second grade consists in the gradual enlargement of the uterus." Similar views are generally entertained in the United States and Canada. Whitridge Williams tells us,—*"The appearance of acute anemia with manifestations of shock in a patient in the later months of pregnancy should always suggest the concealed uterine hemorrhage."*

While it must be admitted that acute anemia and uterine distention are sometimes present, it seems certain that in a case such as I have described, there is no acute anemia or marked distention of the uterus. Therefore, these two symptoms to which so much prominence is given by many, if not by most authors, should receive less consideration in such cases.

What, then, are the symptoms of concealed accidental hemorrhage? They are probably in the majority of cases pain and shock. Pain generally comes on suddenly,—so suddenly sometimes that it resembles the "solar-plexus punch" that "knocks out" the prize fighter. The pain is so entirely different from the ordinary labor pain that the patient and her friends generally realise that something serious has happened. The pain is continuous instead of being intermittent, amounts to extreme agony

and is accompanied by tetanic contraction of the uterine walls, including both body and neck. These symptoms should lead us to suspect that concealed hemorrhage is the possible or probable cause of the patient's condition.

Of course, one may be mistaken, as the following case will show: Mrs. A., aged 25, II-para. In the eighth month of pregnancy was suddenly seized with extreme continuous pain, accompanied by tetanic uterine contraction, July 24, of this year. When I saw the patient I suspected concealed accidental hemorrhage. Morphine was injected and the woman was at once sent to a private hospital, where she received a second dose of morphine and suitable treatment for shock. On the following day there was some local tenderness over the abdomen, with slight elevation of temperature, and catarrhal appendicitis was then suspected. In addition to the administration of morphine, the patient received calomel and castor oil, and recovered in about eight days (no signs of labor appearing in the meantime), and was sent home. On the last day of August labor commenced. She returned to the private hospital and, after a somewhat tedious labor, a healthy child was born September 1. The patient made a good recovery. Careful examination of the placenta revealed no trace of "old clot."

Althought one may make a mistake in diagnosis in such cases, the prompt and appropriate treatment of pain and shock, or in other words, the treatment of symptoms according to the methods of many able obstetricians of fifty or sixty years ago appears to be correct.

Treatment.—In the paper on the concealed variety, reference was made to Goodell's extremely valuable and interesting paper on the same subject. This distinguished obstetrician described in a very graphic way the symptoms, but he did not, in my opinion, properly differentiate between shock from traumatism and collapse from loss of blood; and as a consequence, his advice in such cases, "to deliver the woman as soon as possible," impelled men to carry out very radical forms of delivery with disastrous results.

The following is a synopsis of the treatment I have recommended when traumatic shock is the chief factor.

1. Administer morphine by hypodermic injection, half a grain at once, a quarter of a grain in half an hour after, and another quarter after another half hour, or less, if required; that is, one grain within an hour. Atropine may be given as well, if thought advisable.

2. Lower the patient's head and elevate the foot of the bed.

3. Keep up the body temperature by the external application of artificial heat.

4. Give a high enema of salt solution. Subcutaneous or intravenous injections may sometimes be advisable.

5. Give small doses of strychnine (not more than two doses, of one-thirtieth of a grain each, by hypodermic injection).

The latter recommendation is given with some confidence, notwithstanding the adverse views of certain surgeons. I

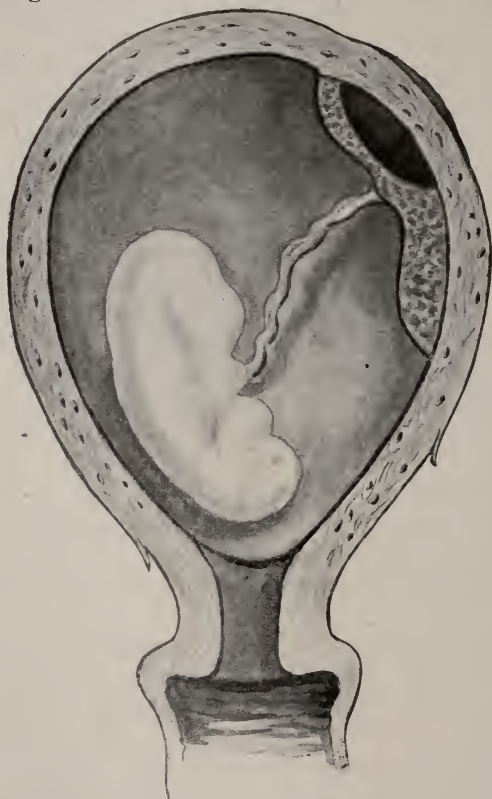


FIG. 1.—Pregnant uterus, seven months, membranes intact, uterine wall tetanically contracted, cervix "hard as iron," showing a post-placental clot between a portion of the placenta and the uterine wall.

believe at the same time that large doses of this medicine are exceedingly dangerous in certain cases of either shock or collapse.

In the discussion which followed the reading of my paper at the Toronto meeting, it was stated, "that the same results could be obtained in many different ways. In Dublin the practice was to plug the vagina; in Edinburgh to rupture the membranes."

I had no opportunity to reply, but I desire now to call attention to the fact that in one of the cases reported (which is also reported today), the clot resulting from the outpour of

blood was entirely post placental, the whole margin of the placenta being adherent to the uterine wall. (Fig. 1). Neither the vaginal plug nor the puncture of the membranes could in this case mitigate the serious symptoms of pain and shock.

The combined internal and external accidental hemorrhage, whether occurring before or during labor, is more easily diagnosed than the purely concealed form; but in certain cases, the diagnosis is sufficiently difficult to cause much perplexity. When, for instance, a quart of blood is retained internally and only two ounces escape externally, we have a condition closely similar to the concealed variety, with intense pain and shock. Under such circumstances it seems reasonable to suppose that the pain and shock are still the prominent symptoms, and should receive very prompt treatment. After complete or partial recovery from pain and shock it would seem well to carry out

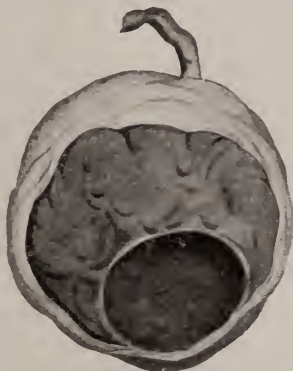


FIG. 2—Placenta from Fig. 1 after delivery, showing on the maternal surface the saucer-shaped cavity occupied by the clot.

the so-called Dublin treatment to which further reference will be made, or perform a vaginal Cesarean section. A report of a case with similar conditions and symptoms will be given later.

In what is known as the external accidental hemorrhage, there is little or no shock, but there may be collapse from loss of blood. It is probably in such cases that the greatest difference of opinion prevails, especially as to two procedures, rupture of the membranes, and the introduction of the vaginal tampon. The puncture of the membranes and the use of the plug are very old procedures in the treatment of accidental hemorrhage.

We are told that one hundred and thirty years ago there was a great difference of opinion on this question, and at that time Leroux, of Dijon, was a strong advocate of "rupture of the membranes," and the "administration of ergot of rye to check the flooding."

The discussions as to these two methods during the first and second thirds of the last century were interesting, and were equal in many respects, and perhaps better in some respects, than the discussions of the last forty years. It would appear from the discussion last August in Toronto that we have not made much progress in a century and a half as to the proper estimate of these two procedures. There can be little or no doubt, however, that each method is good in its proper place.

All things considered, the vaginal plug appears to be more generally useful, and safer, for the various kinds of accidental hemorrhage than any other procedure. And yet, a candidate at a final examination, who expressed such an opinion before a board of examiners in London, England, ten years ago, would probably have been plucked because of such dangerous heterodoxy. That terrible danger of converting an external into an internal hemorrhage was ever present for many years in the minds of the orthodox.

About twenty-five years ago, Spiegelberg and Smyly reintroduced the use of the plug, and England and Scotland were for a time horrified. The results at the Rotunda have been so remarkably good that the whole world has been forced to modify its opinions respecting the procedure. No one pretends, however, that such introduction of a plug is always safe; but it is understood that the proper application of an abdominal binder greatly minimises the dangers.

It is difficult to understand, at the same time, how plugging could accomplish much good in concealed accidental hemorrhage, although we are told that in three cases of this form of hemorrhage occurring at the Rotunda, a plug was used with good effect. I do not know how the diagnosis was reached in these cases, nor when the plug was introduced; but I should suppose that such introduction would be absurd while the patient was suffering, perhaps dying, from shock.

If I should again meet a case similar to that which I have reported in which severe pains came on four days before the onset of labor, I should now be inclined to interfere after the patient had rallied, say on the day after the advent of the acute symptoms. After such a severe nerve storm as I have described, with its prolonged condition of uterine tetanic spasm, a fetus is, so far as I know, always dead.

Although I believe that the statement made by Goodell, that in such cases the rule should be imperative "to deliver the woman as soon as possible," has done a large amount of harm, by encouraging the operation of accouchment forcé, even while the cervix is "as hard as iron," yet I believe that the patient

can hardly be considered safe until the uterus is emptied. I think, therefore, when all symptoms of shock have disappeared, it might be well to introduce a bougie into the uterus, according to the Krause method (being careful not to rupture the membranes), and at the same time introduce a plug into the vagina. This can be done best by using some form of Sim's speculum, introducing a gum elastic or rubber bougie, about 12, English size, as far as possible, and packing the vault of the vagina with antiseptic gauze. I prefer 5 per cent. iodoform gauze.

It seems remarkable that rupture of the membranes in cases of accidental hemorrhage should have had so many advocates during the last one hundred and fifty years. While one of the oldest, it is one of the crudest, and one of the most objectionable obstetrical operations when performed before the onset of labor. There is no doubt, however, that the procedure is an excellent one in its proper place, but its scope as compared with that of the introduction of the vaginal plug is much more restricted. In the case of concealed accidental hemorrhage before the onset of labor, and especially before the effacement of the cervical canal, it is, I think, never justifiable. In the case of the combined internal and external accidental hemorrhage before labor, one cannot speak so positively, but it seems probable that in such cases the operation is unjustifiable. If, however, labor has commenced and the external hemorrhage is serious, the rupture of the membranes will frequently, or perhaps generally, produce a good result by diminishing or frequently stopping the flooding. The puncture of the membranes may produce good results even if done before the onset of labor if there is effacement of the cervical canal. I have not, however, had sufficient experience with this procedure to give a definite opinion in that regard.

It would not be profitable to spend much time discussing accouchement forcé. Its mortality rate, when the patient is suffering from shock, and the uterus is tetanically contracted, is, in my opinion, exactly 100 per cent. I know of no operation in obstetrics or surgery respecting which one can speak more definitely. A certain amount of force may, however, be used when the os is dilatable. For instance, we may have ruptured the membranes before the os is dilated; there may still be considerable hemorrhage, making an early emptying of the uterus desirable. In such a cases manual dilatation of the os, with version or forceps delivery, may be advisable. It is doubtful, however, whether the manual dilatation, under such circumstances, should be designated accouchement forcé.

I should like to discuss the operation of vaginal or abdominal Cesarean section, but I have had no experience in connection with either operation for accidental hemorrhage. In the case

of either concealed, or combined internal and external accidental hemorrhage, with the patient suffering from shock and a cervix as "hard as iron," any operation would probably be unjustifiable. The shock should be properly treated; and if, in spite of such treatment, the symptoms of shock grow worse instead of better, the patient is probably going to die. If, on the other hand, the patient recovers from the shock, it is certain that in some cases, if not in the majority, serious operation is not advisable. It might happen, however, that internal hemorrhage was taking place into a uterus whose walls were stretching rapidly, and the loss of blood was the chief factor. If, in such an emergency, it was not possible to dilate the os, and deliver soon enough to save life, some form of Cesarean section might be deemed advisable. Vaginal section, in one of its varieties, seems the best radical operation in sight; but I am inclined to think its field is exceedingly limited. It seems to me entirely unsuited for such a case as I have reported today, especially when there is doubt as to the diagnosis; but it may be indicated in cases where labor is imminent, or present, especially where loss of blood, whether internally or externally, or both, is the serious factor.

I shall now submit to the Fellows of the Association a case reported something like ninety years ago: "A lady of weakly constitution and delicate habit, was attacked in the later months of pregnancy with a slight discharge of blood from the vagina, not amounting altogether to half an ounce, accompanied with alarming symptoms of exhaustion and debility. The os uteri was scarcely dilated to the size of a sixpence, and was in such a state of rigidity as precluded the possibility of affording any manual assistance. The lady in consequence died, and, on examination after death, it was found that the separation of the center of the placenta from the parietes of the uterus had taken place, whilst its edges were completely adherent, forming a kind of cul-de-sac into which blood had been poured, to the amount of a pint and a half, which had become coagulated within the cavity thus formed."

What would you do in such a case as this? Did this woman die from shock, or from loss of blood, or from a combination of the two? I have never met a case where the loss of a pint and a half of blood without other complication caused death; but I must admit that such a hemorrhage is a serious matter. I think, however, that the rigidity of the os was due to that peculiar nerve storm which is present in such cases, and that the patient died from shock. Under such circumstances, my chief aim would be to first treat the shock, as indicated else-

where in this paper. As to operative procedures I should like to get your opinions.

The main points of this paper are as follows:

1. Making a diagnosis in many cases of concealed accidental hemorrhage is generally difficult, sometimes impossible, before delivery.

2. The so-called important symptoms,—anemia and distention of the uterus,—are not present in a large proportion of such cases.

3. The serious condition in most cases is shock from traumatism, and not collapse from loss of blood.

4. The diagnosis of the combined internal and external accidental hemorrhage is more readily made, but the amount and effect of the blood within the uterus are often difficult to ascertain.

5. Even in such cases, shock from traumatism is sometimes the predominating element; on the other hand, collapse from loss of blood, whether retained within the uterus or flowing externally, is sometimes the important factor.

6. In all cases where shock from traumatism is the main condition, or the predominating element, the most urgent requirement is proper treatment of such shock, and not emptying the uterus.

7. In a large proportion of cases of the combined internal and external hemorrhage, the introduction of the vaginal plug, with the application of an abdominal binder, appears to be a very safe and effectual plan of treatment.

8. In a small proportion of cases, especially during labor, puncture of the membranes is beneficial.

9. Any form of accouchement forcé, which includes forcible dilatation of a rigid cervix is never justifiable.

10. The best operative procedure would appear to be some form of vaginal section; but its field is limited, and not accurately defined.

30 GERRARD STREET EAST.

IMPOTENCE CAUSED BY BROMO-SELTZER.—W. J. Robinson, New York (*Journal A. M. A.*, August 18), reports that a married man consulted him on account of loss of sexual power, but who also suffered from cardiac symptoms, digestive disorder, etc., and had severe headaches, for over a year. Inquiry developed the fact that he had been taking bromo-seltzer for a long time and was using an average two of the dollar-size bottles a week. The drug was voluntarily discontinued by the patient when informed as to its connection with his condition. The special action of bromo-seltzer on the sexual organs as seen in this case, he thinks has not been hitherto reported.

Some Further Observations on Why Minor Gynecological Operations Fail of Anticipated Results.¹

By SIGMUND GOLDBERG, M.D., Buffalo, N. Y.

Gynecologist to the German Hospital and Consulting Gynecologist to the German Hospital Dispensary.

I READ a paper before this section of the Academy, March 24, 1903, entitled, "Why Minor Gynecological Operations Fail to give Anticipated Results." I stated as a general proposition that a minor gynecological operation was one which did not involve the opening of the peritoneal cavity. I also stated in a general way that, given an injury or specific infection of the female genital tract not being immediately repaired and specific infection arrested, it would produce an endometritis which would not limit itself after one or two years to any one portion of the endometrium, but would spread through continuity of tissues, thus involving the adnexa.

I further claimed at the time that the repair of the cervix or treatment of the other minor gynecological conditions would fail to produce perfect cure, the disease after this length of time having gone beyond local treatment, surgical or otherwise. I gave as my conclusions at that time:

1. That all so-called minor gynecological operations to be of any permanent benefit must be performed within at least one year from time of the infliction of the original lesion.
2. That after the passage of about a year either Alexander's operation, trachelorrhaphy, or curettage, or all combined, will be insufficient to restore a patient's perfect health.
3. The reason for such failure in the great majority of such cases, after one year, is because the adnexa are sure to be involved.
4. The best course will be to do some operative procedure intra-abdominally.

I do not consider the above conclusions a plea for the radical opening of the abdomen irrespective of time or condition, but rather for the performance of minor gynecological work much earlier than is the custom of many men at the present time, or not at all except as correlative to more radical work. It is not my intention to bring before you a complete disquisition of this subject as I did on the occasion referred to, but I bring it before you in this manner because of the general interest involved in these subjects, and for the purpose of creating a discussion which may prove both interesting and beneficial.

1. Read before the Section on Obstetrics and Gynecology, Buffalo Academy of Medicine, October 23, 1906.

I quoted Hofmeier as having conducted studies on fresh uteri removed from mammals in which the conditions ought to be the same as in the human female, but he also examined organs removed at the operating table and at once immersed in a warm saline solution. In several of these latter he demonstrated conclusively, by removing strips of endometrium and placing them under the microscope, that minute particles of charcoal were invariably carried by the ciliary movement from the fundus toward the os.

This observation of Hofmeier seems at least to be in harmony with an intelligent design of nature, by which obstacles are interposed to the easy invasion of the upper reaches of the genital tract. But, under the stress of injury or infection, these frail barriers are no longer effective or at least, in a great measure, have lost their potency and this once lost, progressive endometrial infection traveling on and infecting the adnexa, is the next step in the progress of the majority of the sexual ills of woman-kind. Next we find, due to the constant irritation and consequent increased weight of the uterus, a complication of adnexial disease, a retroversion or flexion or both; and this condition I consider the most common complication of adnexial disease.

Therefore, this condition generally receives the most attention, because of its alleged influence on the general health; but to my mind, these various retropositions of the uterus are, *per se*, insufficient to intelligently account for all the symptoms usually ascribed to them. True, they may give some feeling of discomfort, some difficulty of locomotion, and in many cases not even this. The more active symptoms generally ascribed to retroposition, such as pain, metorrhagia, sacralgia, and more or less permanent invalidism, are due to the adnexial involvements. It seems to me the height of folly to repair the cervix and fasten the uterus by the Alexandrian method or any of its modifications. For, after one year, we may feel morally certain that the seeds of disease are sown in the tubes and ovaries, although we may not always be able to positively demonstrate the exact condition by the usual method of examination.

J. Sprecht says that the early stage of pyosalpinx or salpingitis is hard to recognise because it follows immediately upon, or is associated in conjunction with, endometritis, the endometritis masking the symptoms of tubal disease. It is on account of our diagnostic fallibility that so many minor gynecological operations, such as the Alexander, curettage and trachelorrhaphy, result with only a modicum of benefit, and the cause, therefore, being the failure to recognise the early stages of disease in the adnexa.

In substantiation of the above, I have culled from current literature, and shall bring before you some of the thoughts of a

few of the most prominent gynecologists, showing the change of opinion concerning this matter, which has taken place in very recent years, and especially with regard to the importance of a retroverted or a retroflex uterus as a producer of symptoms of pelvic disease.

In the *New York Medical Journal* of April 14, 1906, J. M. Baldy, of Philadelphia, in an article entitled, "Intraperitoneal Shortening of the Round Ligaments," says: "I may consider myself fortunate this evening in being limited to the discussion of the intraperitoneal shortening of the round ligaments for backward displacement of the uterus, because I have long since reached the conclusion that other surgical procedures are inadequate, and their further discussion a waste of time."

When in addition to this consideration is given the fact that so many of the complications are of such a nature as to render the certainty of a prior diagnosis doubtful, a consideration of the operation at all is useless, especially as there are so many other procedures which accomplish without exception everything which the Alexander operation does, and more. The modification of the Alexander operation, which is best and is a vast improvement on the parent procedure, is the Goldspohn method. The fact, however, that this procedure involves two incisions, each at a point at which greater damage may be done than at the site of a single median incision, is quite sufficient to dispose of it, unless there is nothing else to take its place.

Ventrofixation and ventrosuspension are far superior to the Alexander procedure, as they recognise the unassailable position that the operation is performed in view of the complications, allow of a correct diagnosis, and permit an intelligent treatment of the real cause of the symptoms. The displacement itself falls into insignificance, excepting that its existence presupposes a displacement of the ovaries; the ovaries in time become cirrhotic, and this condition eventually is the most potent factor in the production of symptoms for which the patient applies for relief.

Inflammation, adhesions, and other complications form a large group in which a cure of the inflammation, or adhesion, or whatever other complications obtain, will end the case whether or not the uterus be displaced. The mere displacement of the uterus will not continue the symptoms. They allow of a treatment of the complications which in most instances is the treatment of the displacement; Alexander's does not. I have seen too many patients in whom perfect mechanical results were obtained, and still the symptoms persisted, either because the ovaries were hopelessly involved, or a mistake in judgment had been made in operating in a non-surgical case, often in a neurasthenic.

Further, in a discussion of this question before the Obstetrical Society of Philadelphia, March 1, 1906, Dr. George M. Boyd, said, "If it were possible to diagnose a case of uncomplicated retrodisplacement, then the Alexander operation has a field of usefulness which hardly any one can question."

Dr. John C. DaCosta did not think that any operation for old chronic retrodisplacement of the uterus was a satisfactory one, unless the abdomen was opened, for otherwise it could not be known what changes had taken place. In the Alexander operation, the risk was taken of doing a great deal of damage.

Dr. Daniel Longaker said that the treatment of retrodisplacements of the uterus consisted in the treatment of their complications. The results in the days of the Smith-Hodge pessary were probably quite as satisfactory as those of the Alexander operations employed today. One of the gentlemen, Dr. Noble, believed the diagnosis of uncomplicated retroversion could be made.

Dr. Fischer said he desired to congratulate Dr. Noble upon his diagnostic ability. He remarked that he had served an apprenticeship in gynecology extending over a good many years, during which period he had come into contact with men of large experience in gynecological work, and he was forced to say that there had been comparatively few cases of retrodisplacement with symptoms in which conditions of some kind were not found that were unsuspected previous to opening the abdomen. From all accounts, he was almost forced to admit that there were men who could palpate a kink in a *normal* ureter and outline other equally attenuated structures in the pelvis but he, likewise, knew that every now and then a man of this class made a mistake in diagnosis where he happened to succeed. On the other hand, he at times found that he was in error while other men's opinions were confirmed, and it was not an infrequent occurrence to find abdominal section reveal abnormalities that were separately diagnosed by different men, while each in turn might have failed to recognise that which was diagnosed by any one of his conferees.

If, therefore, Dr. Noble's diagnostic ability was of the character intimated, he believed the time had come for many to take a course in gynecology under his instructions. If, as Dr. Baldy had said, it was only the complications which gave rise to symptoms, he would inquire the excuse for one man's doing over 200 Alexander operations, for it is well known that women rarely consulted doctors concerning pelvic condition without first experiencing pelvic symptoms. In reference to the Alexander operation, he thought it scarcely suitable except for one of Dr. Noble's "extraordinary capabilities in the diagnosis of intrapelvic conditions."

And again, in an article published in the Medical Record of March 24, 1906, entitled, "The Uterus and Ovary of Neurasthenia," Robert L. Dickinson, of New York, says in reference to retroversion that there is one retroversion to every five cases in this series. This is about the usual average among gynecological patients. Among parous women, one in ten exhibited marked retroversion. Of these ten, all but one have been anatomical cures, yet failures as far as striking improvement to the general condition goes. Pessary and operation have permanently replaced all but one uterus, and to the pelvic distresses there has been afforded more or less local relief, as of dysmenorrhea and menorrhagia, but the other symptoms persist. The menstrual upset occurs still. The patient comes back asking for pelvic treatment. "It is to be remembered always," to quote his prize words, "that it is not, primarily, the amount of displacement, or flexion, that counts; it is the amount of inflammation, hemorrhage, or enlargement produced." These are the criteria as to the stress to be laid on the mechanical defect.

And still again, Frank C. Hammond, of Philadelphia, in an article published in the New York Medical Journal, August 18, 1906, entitled "A Report of a Year's Work in the Gynecological Service of the Samaritan Hospital, Including the Technique," makes this significant statement: "In the treatment of backward displacement of the uterus, we never employ Alexander operations, always depending upon one of the intraperitoneal procedures.

The foregoing indicates the trend of modern gynecological thought concerning this question, as found in the public medical press, and in the discussions of our most prominent medical men. There is also a change in our most modern gynecological textbooks, but before demonstrating that to you, let me read an extract on retroversion from an article in the American Textbook of Gynecology, giving the following symptomatology: Women with retroversion or retroflexion, complain more of backache and a dragging sensation in the pelvis than of any other symptoms. These may be so great as to amount to actual inability to walk. Leucorrhœa is a prominent symptom, the discharge being milky or purulent. As a result, erosions of the cervix may occur. In septic or inflamed uteri, every movement is felt in the tender organ. Defecation is difficult and often painful, hence postponed as long as possible. Costiveness results with the common accompanying train of anorexia, foul breath, and the like. Dragging upon the bladder often causes the sphincter vesicæ to leak, and dribbling of urine occurs upon laughing or exertion. Pains down the front of the thighs are frequent, and are increased on

motion. Occipital headache and burning pain in the nuchæ, inability to concentrate the thoughts, melancholia, hysteria, and peevishness are common reflex nervous phenomena. The endometrium commonly becomes hypertrophic, and gives rise to increased menstrual flow. This, however, is not painful as a rule, owing to the fluid condition of the blood and patency of the canal."

In Skene's treatise on diseases of women, a similar symptomatology is given. It is refreshing to turn from this conglomeration of hodge-podge to the saner writings of some of the modern authors, as shown in Montgomery's textbook on gynecology. Under the head of symptoms, we find: Retroversion causes few symptoms. The discomfort in the majority of cases arises from complications. Patients may have marked retroversion without experiencing any inconvenience or being aware of the condition until it is brought to their knowledge. Inflammatory complications produce a sensation of weight or dragging, as if everything were about to protrude when the patient stands or walks. The menstrual flow is increased, producing menorrhagia; occasionally, there is an irregular bloody discharge, or the intermenstrual intervals are shortened or, as a result of the coexisting catarrh, the patient will have a profuse leucorrhea.

In the Reference Handbook of the Medical Sciences, Vol. VIII, there is found the following:—Expert knowledge and skill are required to recognise and properly appreciate many of the conditions referred to, while even under an anesthetic, adhesions of the pelvic viscera, if in the form of long bands, will often escape detection. Inasmuch as the uterus has a tendency, when its position is altered by a force from without, to return to its original position, the elastic pressure exerted upon the pessary used, will be likely to produce injurious results. And then, on the other hand, if the normal position be maintained, pressure and traction upon the diseased tissues nearby, will ultimately increase the distress of the patient. An uncomplicated backward displacement of the uterus, for example, is a comparatively rare condition, and, like other displacements, were it not accompanied by increase in the size of the organ, endometritis, salpingitis, chronic peritonitis, pelvic congestion, varicose veins of the broad ligament, and imperfect circulation in lymph channels, it would produce comparatively little disability. While, therefore a displacement of the uterus may be the most easily demonstrated feature in a given case, it cannot be too strongly urged, that attention must first be given to the correction of complicating conditions, and especially to the removal of all adhesions, before the replacement of the uterus, by any form of support, is to be undertaken.

In view of all the above, I feel more than ever justified in asserting that the so-called minor gynecological operations fail of anticipated results, because the time for their performance has long passed, and I plead for an examination of all patients at least one year following parturition or after some specific infection. After about one year, it will be too late for any permanent benefits to be realised, and I agree with the authorities quoted, that only a laparotomy with ocular demonstration and radical treatment, can promise a complete and permanent cure.

508 EAST EAGLE STREET.

PROGRESS IN MEDICAL SCIENCE.

Obstetrics and Gynecology.

By E. S. McKEE, M. D., Cincinnati, Ohio.

PREGNANCY AFTER CONSERVATIVE OPERATION FOR ACUTE GONORRHEAL SALPINGITIS.

STONE (*Amer. Journ. Obstet.*, May, 1906) writes of a single woman aged 20, admitted into hospital with acute abdominal pains, high pulse and temperature. All the symptoms of peritonitis from appendicitis or salpingitis were present. Her intended husband admitted that he was suffering from gonorrhea, and was responsible for the patient's condition. Abdominal section was performed, extensive peritoneal inflammation discovered; it was traced to the right appendages, which were removed. The uterus and left tube were irrigated with mercuric bichloride, as some pus issued from the ostium of the tube when it was brought out of the wound for inspection. The vermiform appendix was removed, the lower end of the abdominal wound drained, and the patient recovered. Ten months after the operation she was married, and at a date not clearly indicated in the report, but apparently about eight years later, she bore a female child.

CORNUAL PREGNANCY; RUPTURE; PREGNANCY IN OPPOSITE CORNU AFTER OPERATION.

DORAN (*Journ. of Obst. and Gyn. of the Brit. Emp.*, June, 1906) publishes a full report of a case in which, in September, 1904, he removed a fetal sac, consisting of the right uterine cornu, for acute hemorrhage due to its rupture. The patient was 27 years of age, and had borne two children. The placenta and membranes protuded from the rupture in the sac; a fetus 3 in. long

was found under the omentum. The sac, with the right Fallopian tube and ovary, was amputated; the left uterine cornu, which had twice been the seat of normal pregnancy, was empty. One year after operation, in September 1905, the patient was spontaneously delivered of a live child at term. Kustner (*Monats. f. Geb. u. Gyn.*, May, 1906) relates another case of cornual pregnancy without rupture, where a similar conservative operation was practised. This patient was 32 years of age, and had been pregnant seven times (including four abortions). She believed herself to be six months pregnant, the period having ceased for that space of time. Uterine duplicity with arrested pregnancy or myoma in one horn was diagnosed and abdominal section performed. The left cornu was removed with the corresponding appendages; it ran into a cervix almost distinct from that connected with the right cornu (uterus pseudodidelphys, rarer than uterus bicornis unicollis). There were no complications during convalescence. The amputated left cornu contained a much flattened fetus of about the sixth month without a trace of amniotic fluid. In neither of the above cases did the cavity of the cornual sac communicate with that of the opposite cornu or with the canal of the cervix.

PERILS OF INTRAUTERINE INSTRUMENTS.

JAKOB (*Zent f Gyn. No. 19, 1906*) in a thesis on the dangers of intrauterine instrumental treatment, has collected 141 cases of perforation of the uterus and others of alleged sounding of the Fallopian tube. The perforations were caused by the curet in 73 cases, the sound in 19, the dilator in 16, the ovum forceps in 14, and the nozzle of a syringe in 6. In 64 cases the uterus had been gravid, 30 being abortions, 34 puerperal. In 12 cases instruments were used for metritis independent of gestation, in 7 for malignant growths, in 3 for removal of a polypus, and in 1 the uterus was perforated during the application of the tampon after abortion. In 5 instances of perforation each case was under treatment for retroflexion, in 4 a fibroid uterus was perforated. Rupture of the uterus during pregnancy occurred in 4 cases where there had previously been instrumental perforation. Jakob declares that he has collected 7 authentic cases where the sound entered the tube, 23 out of the 141 cases of perforation ended fatally, mostly through septic peritonitis, whilst in 77 no grave symptoms were noted. When danger threatens the patient after an intrauterine wound, abdominal section, with or without extirpation of the damaged uterus, is indicated. In some cases the iodoform gauze tampon, or even opiates and applications of ice, have proved sufficient. In 2 cases where spontaneous healing

occurred abdominal section was necessary afterward on account of extensive adhesions.

LABOR OBSTRUCTED BY UNRUPTURED HYMEN.

DR. EDWIN CHILL (Ealing, W.) writes: The following case, which came under my care some time ago in North London, (*British Med. Journ.*, July 28, 1906) is worth recording. With an experience of over 3,000 labors during the last twenty-three years, this is the only example of the kind I have had, though similar instances are mentioned in obstetrical works. The patient was a young woman who had been married about a year. When summoned to attend, labor had progressed for many hours, for the fetal head was well down on the perineum. The hymen was firm, rigid, and unyielding, and would not admit even the little finger. As this condition was obstructing labor, I made several incisions into the hard, fibrous material, after which delivery proceeded naturally. The perineum was slightly lacerated, but this was purposely left unsutured. The presentation was normal; no complications followed, and the mother subsequently did well.

EMBRYOTOMY ON THE LIVING INFANT

PIERRE BUDIN (*L'Obstetrique*, May, 1906) describes a case in which to save the life of the mother embryotomy on her living child was carried out. In this case the woman possessed a Nægle pelvis and efforts to deliver by forceps were fruitless. The woman made a good recovery from the operation. He gives the opinions of many of the leading obstetricians as to whether embryotomy on a living child is justifiable or not. The majority of these agree that in certain cases the proceeding is quite justifiable and is especially indicated in those cases in which Cesarean section or symphysiotomy, even if successfully carried out, would not suffice to save a child the life of which had already been considerably imperiled by the prolonged labor.

WILLIAM J. ROBINSON (*Critic and Guide*, March, 1906) in a paper on "Proprietary Remedies from the Physician's Standpoint": Urotropin was a distinctly new drug when introduced by its manufacturers, and they and Nicolaier have rendered a real service to humanity. Why should they not derive pecuniary benefit? I am not at all sure that every nondescript brand is as pure as urotropin, and the patient has to pay the same price.

ABSTRACTS.

SILVER THERAPY.

SOLOMON SOLIS COHEN, Philadelphia, writing on the subject, (*Saint Louis Med. Rev.*, February 24, 1906) says that the knowledge of the power of colloidal silver (collargol) in septic and septic-toxic conditions should be made more general. He has seen two recoveries from malignant endocarditis and numerous recoveries from other grave infections by its energetic employment intravenously and per rectum. Suppositories may be used instead of rectal injections, and they are especially available in children. An adult may be given 2 to 3 gr., a child 1 gr., in each suppository. Although the solution is itself antiseptic, no precaution should be neglected when intravenous injection is done. It is best to use an all-glass syringe with a platino-iridium needle and with a tight but smooth conical metal attachment between needle and syringe. The needle may be inserted into a superficial vein of the hand, forearm, or flexure of the elbow after the vein has been made prominent by pressure above. When blood issues from the needle, the syringe is attached, pressure relaxed, and injection made. Fifteen to 60 min. of a 2% to 5% solution, made with sterilized, distilled water, should be used. One intravenous or two rectal injections daily usually suffice. As improvement follows, the intervals between injections may be lengthened.

Several cases observed recently at the Philadelphia Hospital are worthy of mention. Used promptly after chill, in the stage of congestion, as evidenced by dulness and crepitant rales, colloidal silver seemed to abort an attack of pneumonia. At all events the temperature fell within 48 hours from 104°F. to normal, sweating occurred, respiration fell from 40 to 28, pulse from 120 to 90; and within 3 days large moist rales were present in the dull area, which cleared up completely in about 7 days from the first appearance of symptoms. In several cases of broncho-pneumonia complicating typhoid fever, improvement rapidly followed the institution of the treatment. In one case of tuberculous diarrhea, with tubercle bacilli in the feces but no visible lung signs, the rectal injection of colloidal silver quickly controlled the symptoms. The patient left the hospital apparently well with feces seemingly free from tubercle bacilli; at least, repeated examinations by Dr. Rosenberger, director of the pathological laboratory, failed to show any. Cohen has been less successful in controlling the mixed infection of phthisis by colloidal silver. German physicians advocate its use twice daily by mouth and once daily by rectum. The dose is about 2 grains

each time. In a case of streptothrix phthisis, however, great improvement in general condition and in pulmonary signs, with lessening of the quantity of septum and apparent attenuation of the streptothrix culture, has followed the use of colloidal silver. In a case of bronchopneumonia in an infant with severe meningeal symptoms, a recovery followed the use of colloidal silver suppositories, aided by the injection of colloidal silver ointment over the site of the cervical blister.

The usual fault in the administration of this agent is delay and timidity. It must be used promptly and freely, and when so used the results are gratifying. The indications are septicemia and the toxemia of infection, without regard to the special microorganism concerned. The author has not seen from injection results at all comparable to those obtained by intravenous or rectal injection.

UROTROPIN AND HELMITOL.

GUIARD (*Annales des maladies des organes genitourinaires*, October 1, 1905) considers that the efficacy of helmitol is exclusively due to the urotropin which enters into its composition. It has also the same clinical indications, since it is always the urotropin which is its chief active principle. As helmitol is associated with an acid sometimes injurious and of doubtful value, it is better to employ the less complicated drug, urotropin. Again, urotropin will be found to be cheaper than helmitol. Urotropin is the preferable drug from the standpoint of efficacy, innocuity, and economy. Urotropin must, however, be absolutely perfect. Many of the preparations on the market are of doubtful value, or are positively injurious.—*American Journal of the Medical Sciences*, May, 1906.

THE DIAGNOSTIC VALUE OF THE CYSTOSCOPE AND URETERAL CATHETER.—John Edgerton Cannaday concludes that the cystoscope as an accurate scientific instrument is of comparatively recent inception and perfection; that the other mechanical aids to the collection of the separate urines are not by any means absolutely dependable; that the cystoscope and ureteral catheter have their limitations, shortcomings and defects, and are not ideal; that these appliances are of especial value in diagnosing the causes of hematuria, in the discovery of calculi and foreign bodies in the bladder; that a careful study of the ureteral offices gives more than an inkling of the conditions present in ureter and kidney. Definite information concerning the origin of a pyuria can be elicited by the use of the cystoscope and ureteral catheter which could not have been obtained in any other way.—*Medical Record*, November 24, 1906.

TOPICS OF PUBLIC INTEREST.

A Free University.

AT the forty-fourth annual convocation of the University of the State of New York, held at Albany, October 25-27, 1906, Dr. St. Clair McKelway, of Brooklyn, vice-chancellor of the university, delivered the chancellors' address, the feature of which was a prediction that free university education would ultimately prevail in this state.

DR. M'KELWAY'S ADDRESS.

MY FRIENDS—The change in our time of meeting will be the first thought in your minds. The Convocation Council made that change thoughtfully. That council comprises representatives of great educational interests in relation with the state. The change of date was reached deliberately. Our midsummer meetings, the memory of many of which is fragrant and inspiring, coincided with other educational occasions which made attendance upon Convocation difficult, and which rendered the presence of not a few eminent educators impossible. Our numbers even at midsummer were rarely small, but the difficulty many had in coming to us was sometimes extreme.

The change of date is, of course, an experiment. The result of this meeting may vindicate the experiment, and we all hope it will. There are no vacations immediately confronting us. Between now and the national holiday soon to occur is enough time for us to deliberate here and depart without a sense of haste to our places of abode. To be sure, an election of significant strenuosity is at hand, but the issues and the candidates to come to judgment at the polls are well known to the people and bear no relation whatever to the work in which we are engaged. Neither the conduct of the State Department of Education, nor the record of the Board of Regents, nor the condition of our school system, nor the organization of our state department enters into any platforms or nominations now challenging discussion and nearing decision at the hands of voters. We have no right to apprehend any consequences whatever to our educational system from any result at the polls in this commonwealth in November next, and we certainly have no reason to suppose that any issues or candidates then to be passed on will engage our attention as a convocation during the present meeting.

The reorganisation and the consolidation of our state educational system can now be said to have enough history behind it to justify congratulation and confidence. Where there were two boards there is now but one. Where there were two systems

there is now a consolidated system. Where there was conflict there is now concord, and where there was friction or war is now peace.

Advantages can be suggested larger than these. The state has unified its educational system. From the kindergarten all the way through the university the line is straight, plain and strong. The scheme which the parent has in view for the child from when it lisps in numbers to when, again gowned, it marches to graduation, is the scheme which the state has at last enacted. One might think that this simplicity and progressiveness would have been provided at the start. Such, however, was not the case. Education came to the people from the top to the foundation, from the summit to the plain. This was because the original scheme of education contemplated a chosen few rather than the people as a whole. University education is a thousand years older than common school education. But common school education is now the chief solicitude, at least of all enlightened republics, and the provision of it is the bulwark and the glory of the constitutions of all free nations. The first lien on all taxation is held by our common school system. That system is broad enough in many of our states to comprehend the education of the child from the beginning to the end of his scholastic life. I have no objection to the state of New York making its system as broad, as long and as thorough as that. I can conceive of no department of instruction, saving theology, which any new state could not well take in charge, and to which any older state, such as New York, could not safely adjust its educational economy.

A FREE UNIVERSITY EVENTUALLY.

Some of this work of assumption and absorption by our own state must be left to the generations that will succeed our own. We can, however, wisely be more hospitable than hostile to the proposition. We may not expedite it, but we can anticipate it. We would not antagonize private foundations, but we can look forward to the provision of state foundations as broad as those laid in younger commonwealths, and we can confidently expect not a few private foundations of which the conductors are embarrassed and in debt willingly to seek state absorption in the years to come. This would do no violence to specialism or to private initiative. The state is so strong that it can tax all private wealth at will, and so rich that private wealth can provide nothing for its representatives or their children which the state cannot itself provide for the people as a whole. The free school, the free academy, the free college, the latter in parts of our commonwealth, we already have. The free university, with a full complement

of professional schools, younger states have and have long had, and this state will eventually have beyond doubt. We may not live to see it, but none of us can live long enough to prevent it, and not a few of us, I hope, will live long enough heartily to welcome it.

The trend of our state toward professional education is a surety and prophecy of this. We allow private institutions to prepare for us law students, but only by state examiners and by state courts can they be admitted to the bar. We allow private institutions to send up to us students in dentistry, in pharmacy, in accountancy, and what not? But only by examinations under state auspices can they be licensed for the practice of their callings. Students of medicine and surgery are similarly educated under private auspices or under chartered institutions allowed by the state, but the medical boards, before which they must finally appear, and by which alone they can be qualified to practise, are provided by state law through our State Board of Regents, as you all well know. All this final state action is a moral justification and a logical prophecy of state initiative in every one of these fields.

When I first became a member of the Board of Regents none of these powers and duties sustained any relation to that board or that board to them. The progressive course which the state pursued brought all these professions under state control in the ultimate, and in that fact is the warrant that the state will provide the power to affect these professions at the initiative. The state will be in no hurry. Time and gravitation will take care of the matter. Both can be trusted to assure their work, and those of us who may indicate or justify our temperament and our conviction, whether by protest or by support, can neither quicken nor stay the forces which in events are as inherent and as indicative as character in the man or in the state.

I think that our present state system of education, which unifies forces, which simplifies mechanism, which harmonizes interests, and which articulates the Educational Department with all the life of all the people, with all the aspirations of all the people, making that department as democratic and as representative as the people are themselves, has been vindicated by the peaceful and progressive results which it has accomplished, or with which it has concurred, and will be so vindicated for as long as our government shall endure among men.

THE REGENTS ACADEMIC EXAMINATIONS.

At this convocation the State Board of Regents perfected the personnel of the state board of examinations, which is to have

charge in the future of the preparation of the question papers for the State Regents' examinations. The appointees are representative of the colleges, the secondary and the elementary schools. They are as follows:

Colleges—Nicholas Murray Butler, president of Columbia University; Rush Rhees, president of the University of Rochester; James R. Day, chancellor of Syracuse University; David W. Hearn, president of the College of St. Francis Xavier, and A. V. V. Raymond, president of Union University, Schenectady.

Secondary Schools—Edward L. Stevens, associate city superintendent, in charge of high schools, New York City; Walter B. Gunnison, principal of Erasmus Hall High School, Brooklyn; Frank Rollins, principal of Stuyvesant High School, Manhattan; Frank D. Boynton, principal of the Ithaca High School, Ithaca, and L. F. Hodge, principal of Franklin Academy, Malone.

Elementary Schools—William Henry Maxwell, superintendent, New York City; Henry P. Emerson, superintendent, Buffalo; A. B. Blodgett, superintendent, Syracuse; Charles E. Gorton, superintendent, Yonkers, and Richard A. Vearing, superintendent, North Tonawanda.

The board consists of twenty members. The Commissioner of Education, the three assistant commissioners and the chief of the examinations division are ex officio members. The appointive members shall serve for four years, but the first appointees for each group shall serve for one, two, three and four years, as designated by the Board of Regents.

The functions of the examinations board shall be to appoint, with the approval of the Commissioner of Education, committees to prepare question papers for state examinations, and to advise with the Commissioner in respect to the form and contents of syllabuses and covering the subjects of study in the elementary and secondary schools.

CHOREA CONSIDERED AS CEREBRAL RHEUMATISM. Sir Dyce Duckworth (*British Medical Journal*) after a careful study for a number of years has become convinced that there is more than a commonly accepted intimate association between rheumatism and chorea and that chorea is in fact a cerebral form of rheumatism. His statistics show that there is a family or personal history of rheumatism in 85 per cent. of cases of chorea. He believes that were it possible to obtain accurate histories the per cent. would be larger.—*Wisconsin Medical Recorder*.

CORRESPONDENCE.

“Unnecessary Operations on Women.”

EDITOR SURGERY, GYNECOLOGY AND OBSTETRICS.

SIR: In the last twenty-five years the treatment of disease has become, year by year, more surgical. As a medical student twenty-five years ago, I can remember the limited application of surgery as compared with its range today. In the college clinic we saw fractures and dislocations, stone in the bladder, osteomyelitis, operations for strangulated hernia and extravasated urine amputations, the removal of the breast, an occasional ovariectomy, and operations for malignant tumors. We saw practically nothing of the great mass of work which fills the modern surgical clinic today. No radical cures for hernia, no appendicitis operations, no stomach surgery, no kidney surgery, no gallstone surgery, no hysterectomies, little of modern gynecology, no resections of the intestines for carcinoma, no thyroidectomies, no laryngectomies, no brain or spinal cord surgery. These fields of surgery have practically been created since 1880.

Every one who has lived through the period in question, and who is in a position to compare the work of today with the work of twenty-five years ago, knows that thousands of lives have been saved and thousands of people have been freed from suffering by modern surgery. The advances have been marvelous. Modern surgery has been a great boon to humanity. Modern surgery has been so successful, it has become so easy to secure aseptic results, that there has grown up with it a curse, i. e., the doing of operations which are unnecessary and unwarranted. No class of operators has been entirely free from this curse, but the specialists, with their narrower range of vision and limited work, have undoubtedly suffered more from it than the general surgeon, who, however, has been by no means free from its influence.

The principal sufferers have been women, and the principal offenders have been men who have limited their work to gynecology. Women are the easy victims of the surgeon who advises and performs unnecessary operations. Nine out of ten women who consult a physician because they do not feel well will believe, if they are told so, that their sexual organs are at fault, and will submit to an operation if it is suggested that it is necessary for a cure. The result has been that where the general practice of medicine shows a wider application of surgical therapeutics than formerly, the practice of gynecology has become wholly surgical. There are many gynecologists who do not think of taking charge of a woman except for an operation, and the percentage of women who apply to them for advice, and in whom they find no indication for an operation, is so small as hardly to form, as the chemist would say, a trace in the sum total. This situation is an interesting study, and I shall endeavor to give my impressions of it.

Are all these operations necessary?

In reply to this question, I shall say that my own impression of the surgical work done on women, especially that done by men who limit their work to gynecology, is that certainly thirty per cent. of it is unnecessary and unwarranted. These unnecessary operations are made up largely of the following:

1. Curettings without pathological warrant.
2. Repair of the ordinary torn cervix.
3. Amputation of the cervix.
4. The repair of the relaxed outlet, without any visible impairment in function.
5. The many operations for retroposition of the movable uterus.
6. The operations for so-called cystic degeneration of the ovary,—a condition which is found in almost all female cadavers, and which is physiological and not pathological.
7. The removal of the uterus for small innocuous fibroids.
8. The fixing of the palpable right kidney, which is so common in women, that, depending on the personal equation of the operator, it can be found in from ten per cent. to thirty per cent. of women.
9. Operations such as resection or removal of ovaries because they are believed to be the cause of reflex symptoms in stomach, back, etc.

If I am right in my statement that thirty per cent. of these operations are unnecessary and unwarranted, what is the explanation?

Are these operators dishonest?

Are they ignorant?

Are they misguided surgical enthusiasts?

The answer is, that some of them are dishonest, some are ignorant, and some are misguided surgical enthusiasts.

Some are dishonest, and operate for the patient's fee.

Some are ignorant of broad pathological principles, and operate on these cases because they have been taught by their professors and colleagues to do so.

Some are misguided enthusiasts, who are honest, who have good anatomical and pathological training, but who have so limited their vision to their specialty that they believe that it and they are the center of the pathological female human universe, about which all else revolves.

If I am right in my statements, what is the remedy for this condition, which so menaces modern medicine? I believe that it is publicity; frank, open discussion in just such journals as this, which is not limited to a single speciality, but is devoted to the broad field of obstetrics, gynecology, and surgery.

A discussion in our medical societies of the subject of unnecessary and unwarranted operations might accomplish much good. Medical students must not be trained by the men whose misguided enthusiasm is responsible for most of this work. Operators must be made to realise more fully the great responsi-

bility which is assumed in undertaking any operation, and must be made to see the criminal side to the unnecessary operation. Operators must broaden their horizon to cover the entire human body. The successful surgeon of the future will be the skilled general diagnostician who can operate. The gynecologist of today is extending his field and is operating on the appendix or kidney, gall-bladder or stomach, in many cases which, ten years ago, he would have submitted unsuccessfully to operations on the uterus and ovaries. The wider the territory which he covers, the better gynecologist will he become, and the fewer unnecessary operations will he perform.

I have limited my remarks to unnecessary operations on women because these present such a glaring evil, and I have singled out the gynecologist because he is responsible for much of this work. The same criticisms are to be made of the general surgeon or the operator in any specialty, who for fee, or through ignorance or misguided enthusiasm, submits a human being to the risks and costs of an unnecessary and unwarranted operation. All praise to the splendid achievements of modern surgery, all honor to the modern surgeon who gives his patients the benefit of operations which relieve suffering and prolong life; but what of him into whose hands a patient's life has been intrusted, and who for fee or fame, because of ignorance or enthusiasm, risks this life by an operation which is not necessary and is unwarranted?

We should recognise the existence of this evil and make every effort to do away with it.

Chicago.

ARTHUR DEAN BEVAN.

"Unnecessary Operations on Women."

EDITOR SURGERY, GYNECOLOGY AND OBSTETRICS.

SIR: The last number (October) of your admirable journal contains a communication with the above title, by Dr. Arthur Dean Bevan, which casts undeserved reproach upon a class of honorable surgeons engaged in special practice. Such an indictment as is drawn therein should not pass before the attention of your many readers unchallenged. Every one who knows Dr. Bevan personally, as I do, knows that he is incapable of *intentionally* doing injustice to any individual or class of individuals, or to any good motive or principle. Hence, I believe that his observations have been faulty, or perhaps, unfortunate; for his deductions are unwarranted by the facts.

After tersely reciting the marvelous advances of modern surgery, which have resulted in rescuing thousands from otherwise incurable disease and relieving inestimable suffering, Dr. Bevan declares that with this great boon to humanity there has been developed a *curse*, which curse consists in the doing of operations which are unwarranted and unnecessary. He says the principal sufferers are women, who are prone to believe their sexual organs

are diseased when consulting a physician, and ready to submit to operation, if advised. Further, he states, "the principal offenders have been men who have limited their work to gynecology;" that "there are many gynecologists who do not think of taking charge of a woman except for an operation, and the percentage of women who apply to them for advice, and in whom they find no indication for an operation, is so small as hardly to form, as the chemist would say, a trace in the sum total." He then asks the question: "Are all these operations necessary?" and thus answers it: "In reply to this question I shall say that my own impression of the surgical work done on women, especially that done by men who limit their work to gynecology, is that certainly thirty per cent. of it is unnecessary and unwarranted." In a word, Dr. Bevan declares that almost one third of the operations done by gynecologists are unnecessary and unwarranted. This is a most serious accusation; and, if true, would justly deprive a large class of special surgeons of the confidence and respect of their professional brethren and also of the general public.

I quite agree with Dr. Bevan that with the modern hospital and trained operating-room nurse, aseptic results are made easy; and, as a result, needless operations are done and operations are undertaken by those who have neither the knowledge nor training to fit them for such work. But I deny that special surgeons are given to this wrong more than general surgeons.

Unnecessary and unwarranted operations can only obtain from two causes: imperfect knowledge and skill, or dishonesty, on the part of the surgeon who advises and does such operations. Now, is it true that gynecological surgeons are unequal in scientific knowledge and skill to their confreres engaged in other departments of surgery; or are they less honest than other practitioners? Dr. Bevan says "the same criticisms are to be made of the general surgeon or the operator in any specialty who, for fee or through ignorance or misguided enthusiasm, submits a human being to the risks and costs of an unnecessary or unwarranted operation;" and again: "I have singled out the gynecologist because he is responsible for much of this work." It will be noted that our author leaves no one in doubt as to the particular body of practitioners against whom his accusation is directed.

Now, is it true that gynecologists are deficient in scientific knowledge or surgical skill? On the contrary, any account of the great advances and achievements of modern surgery would be glaringly inaccurate did it not concede to gynecologists a most conspicuous place both in its foundation and development. Who, in the development of abdominal surgery, which is the crowning glory of modern surgical achievement, did more to blaze the way than Marion Sims? He first, after the discovery of antisept-

tic methods of operating, directed attention to the surgery of the gall-bladder and ducts, and advocated immediate operation for penetrating wounds of the abdomen. Who, after Lord Lister, did more to simplify and perfect the modern operative technic, and, at the same time, to extend the scope of intraperitoneal surgery than Lawson Tait? These two men are the founders of modern gynecology. And have their successors and followers been wanting in scientific knowledge or operative skill? Have the numerous men engaged in teaching and practising gynecology in more recent years, proved unworthy of their predecessors? It is well known to the profession that pelvic surgery in women has attained a degree of refinement and precision unsurpassed in any field of surgery, and that gynecological surgeons have borne a most conspicuous part in developing the surgery of the gallducts and liver; also of appendicitis, and of the urinary tract. In a word, modern abdominal surgery is, in great part, an outgrowth of pelvic surgery, and gynecological surgeons have been foremost in this great achievement. Certainly Dr. Bevan cannot have these men in mind when he describes some gynecologists as having "so limited their vision to their specialty that they believe that it and they are the center of the pathological female human universe about which all else revolves."

The principal feature of Dr. Bevan's article to which my protest is directed is that he has singled out a special class of the profession to which he distinctly attributes an exceptional proportion of dishonesty and wrong-doing. This is altogether without any warrant. Gynecological surgeons under every test stand the peers of any other class of physicians or surgeons.

In the development of new fields of surgical work some errors are unavoidable. I allude to the errors that are corrected by increasing experience and accumulating knowledge. Such errors have occurred both in special and general surgery. As apt illustrations I might cite the unnecessary removal of the ovaries which followed the pioneer work of Battey, Hegar and Tait; and the excision of the coccyx for neurasthenic tenderness, for some time practised by general surgeons. In the correction of these errors, the gynecologists were foremost in stopping abuse and establishing correct standards of practice. This is attested by the extensive space devoted to conservatism in both the periodical and textbook literature of modern gynecology. I am sure of my ground when I say that in the practice of gynecologists, judging from my personal knowledge of their work, in quite one third of the patients who are referred, or apply, for operation, operation is *not* done. It is my knowledge upon this point which impels me to resent Dr. Bevan's charge that thirty per cent. of the operations

done by gynecologists are unwarranted and unnecessary. Can the same discrimination in deciding the question of operation be accredited the general surgeon in gynecological cases as is exercised in those cases by the gynecologist? Does concentrated study and exceptional experience in a special field of research and practice impair surgical judgment and lessen one's resources in treating that special class of cases? On the contrary, it is well known that error is more common with those of desultory and superficial study, with lessened clinical experience. Surely, no one would claim that the moral responsibility of a surgeon is affected by either special or general surgery. That is a condition inherent in the individual, and is not altered by any particular field of professional labor.

In conclusion, I must dissent wholly from Dr. Bevan's estimate as to specialism in medicine and surgery. Pervading his entire article is a depreciation of specialism in every department of surgery. If he would protest against specialism without broad general knowledge of pathology and training in general medicine and surgery, his position could not be questioned. But no one can belittle the great offices of special work—like neurology and pediatrics in medicine, or such as ophthalmology, gynecology and orthopedics in surgery—in advancing scientific knowledge and perfecting the results of treatment.

The late Samuel D. Gross, the foremost surgeon of his day, died during the first decade of the antiseptic era. With clear vision he realized that the golden age of surgery was at hand. After recounting the advances established and assured by Lister's great discovery, he wrote of the influences so potent in advancing surgery, as follows: "Specialism," too, is entitled to undying praise. It has penetrated with its methods and instruments of research the innermost recesses of the human body, and has achieved, in a comparatively brief period, triumphs which general surgery could not have achieved in half a century, if ever." I submit that these words are as applicable to the surgical work of the present time as when penned by the Nestor of American Surgery.

(Signed) LEWIS S. McMURTRY.

LOUISVILLE, KY., NOVEMBER 1, 1906.

1. NOTE.—The foregoing correspondence appeared in *Surgery, Gynecology and Obstetrics*,—Dr. Bevan's letter in October, and Dr. McMurry's in November. It is reproduced here because of its importance, and to give it to such of our readers who may not chance to see it in the original. We make editorial reference elsewhere to this remarkable correspondence.—Editor BUFFALO MEDICAL JOURNAL.

"Blindness and Legislation."

Dr. F. Park Lewis answers Criticisms in Regard to proposed Legislation looking to the Prevention of Ophthalmia Neonatorum.

EDITOR BUFFALO MEDICAL JOURNAL.

SIR: The following editorial paragraph is clipped from the October issue of the Saint Louis Courier of Medicine, which I desire a little space in your journal to answer, as it seems important that a clear understanding of this whole matter shall be had.

"BLINDNESS AND LEGISLATION.

"Does it not seem strange that legislation should be considered necessary to urge physicians and midwives to do their duty? At least that is what the resolution of Park Lewis at the Boston meeting of the American Medical Association really means. We question very much that blindness due to ophthalmia will become very much reduced by such legislation. The disease is certainly much less dreaded now than formerly, and Cr  d  's method is more generally used; consequently, an additional legislative act seems an unnecessary burden on the statute books. It is well, however, for the Boards of Health to add ophthalmia neonatorum to the list of contagious diseases; it will make the physicians more circumspect if they are compelled to report these cases.—*St. Louis Courier of Medicine*, October."

The above would seem to be a very natural criticism on a most important subject and as the misapprehensions on which it is based may be shared by others, may I be permitted space to correct them? As Cr  d   and many others have demonstrated, the use of silver nitrate is an almost absolute preventive and specific for ophthalmia neonatorum. If some form of silver is not employed this disease is quite as prevalent and quite as dangerous as it has ever been. While it is true that in the better hospitals and in the hands of many careful physicians the Cr  d   method has become a routine measure,—there are still large numbers of practising physicians who never use it until the ophthalmia has developed, if they do then,—when it is often too late; while by the thousands of midwives it is never used at all. Some years ago I personally investigated the number of births attended by midwives in the City of Buffalo for a single year and I found the proportion to be more than one half. About nine thousand children were born in this city in 1900. No midwife has, or is expected, to use the Cr  d   silver solution as a part of the child's toilet. It does not occasion surprise, therefore, that cases of infantile ophthalmia are still appearing in the clinics at ophthalmic hospitals and that a procession of sightless children

is still annually augmenting the ranks of our schools for the blind.

The pathos of this needless blindness must appeal to every humane instinct of those who witness it. The blot on our medical scutcheon, due to our apathy in allowing a preventable germ disease for which the specific is known to continue and to result in a prodigal waste of human eyes year after year, is a challenge to our claim as a scientific body. This disease as a cause of blindness should and must be absolutely wiped out.

The method by which this measure of relief can be applied is simple. Legislation cannot compel the use of a medical measure but it can make possible its employment. Doubtless these hundreds of good women practising their vocations as accoucheurs would gladly use the silver solution in the new-born babies' eyes but they have not got it. Even if permitted, as they are not, they could not write a prescription for it and they would not know whether the nitrate of silver should be used in a 2% or in a 50% solution.

There is but one way in which the routine employment of the silver salt as a part of the infant's toilet may be assured and that is to put in the hands of the accoucheur, whether midwife or physician, *a sealed receptacle, containing a pure solution, of ascertained strength, with directions for its employment*, the whole with the authority and by the advice of the State or local Board of Health.

This makes imperative uniform legislation which can be secured only by the hearty cooperation of the medical press. The legislation required in any state is that which will place by statute ophthalmia neonatorum on the list of infectious communicable diseases—which will secure an annual appropriation of sufficient size to permit the local health officers to distribute gratuitously a preparation of the silver wherever necessary and to take such other measures as may be required to give sanitary protection to the eyes of every new-born child.

454 FRANKLIN STREET.

F. PARK LEWIS.

Buffalo, November 5, 1906.

Interstate Reciprocity in Medical Licensure.

Health Commissioner Dixon, of Pennsylvania, points out what he considers an insuperable obstacle to reciprocity. The New York Medical Statute removes this barrier.

EDITOR BUFFALO MEDICAL JOURNAL.

SIR: Your issue for the present month contains an interesting discussion of the question of Interstate Reciprocity in Medical Licensure by yourself and Dr. Howard J. Rogers, First Assistant Commissioner of Education of the State of New York.

Allow me to present what appears to me an insuperable obstacle to such reciprocity, not so much from an academical or educational as a moral standpoint. This consists in the fact that at the present time a medical license is in Pennsylvania, at least, irrevocable.

In this State a man may receive his license and subsequently be convicted of criminal malpractice, serve his time in prison, and then be turned loose upon the community to flaunt his license in the face of an unsuspecting public.

Under these circumstances the New York Regents would scarcely feel justified in accepting a license issued by Pennsylvania without rigid scrutiny of the entire career of the applicant.

There should be some authority designated by law in whom should be confided the power of revoking a license where a licensee has been convicted of crime. I would suggest tentatively that the Supreme Court of a state would be an appropriate body to be charged with such power. When a license has been revoked, notice of the fact should be at once communicated to each of the State Licensing Boards in reciprocity with the state revoking the same, accompanied with a statement of the reasons for such action.

SAMUEL G. DIXON,
Commissioner of Health.

PENNSYLVANIA DEPARTMENT OF HEALTH,
HARRISBURG, OCTOBER 20, 1906.

NOTE BY THE EDITOR.—Dr. Dixon's letter is published as an item of interest, but the fervor of his contention is weakened so far as this state is concerned by the fact that Sec. 10 of the New York Medical Statute gives the regents the power to revoke a license for cause, upon the recommendation of the state board of Medical Examiners. This power has been exercised on several occasions, and applies to the endorsement of the license of another as well as to granting an original license to practice.

A National Department of Health.

**Professor J. Pease Norton, of Yale University, Department of Social Science,
Advocates the Establishment of a Department of Health at Washington
as an Administrative Branch of the Government.**

EDITOR BUFFALO MEDICAL JOURNAL:

SIR:—Pasteur wrote: It is within the power of man to rid himself of every parasitic disease.

The time has now arrived, in the judgment of many persons, for establishing a National Department of Health at Washington to wage warfare against the preventable diseases of mankind. In a similar way, the United States Department of Agriculture has expended during the last ten years fifty millions of dollars in a splendid fight against the diseases of plants and animals.

The fearful wastes of death and sickness and the dreadful havoc wrought can never be described. The fiercest battles ever fought left no such bloody trails, even when the mailed hand of war smote cruelest and harshest, as the crimson boulevards—*ten-death-chariots-wide*—traced by the passing finger touches of pneumonia or consumption wastes within a week's end span. Along these ghastly boulevards will be strewn, before twelve months are gone, more blasted hopes and broken hearts than all the countless grinning skulls slain in fair fights and whitening battlefields since time began.

Could the 750,000 persons in the United States marked for death during the next twelve months from preventable causes voice in a threniad verdict their conviction, in a last solemn *morituri salutamus*, who can doubt what would be their admonition: that good health is more precious than rubies, and a long life well lived fairer than beaten gold. Who can doubt, if these measures were before the nation, how they would cast their verdicts? As the slaves chained to the chairs of the conquerors in the triumphs that are gone, so the passing hours silently remind us: "And we too are mortal."

In the accompanying paper read before the American Association for the Advancement of Science, partial data have been assembled concerning the magnitude of these wastes and the possibilities of prevention. The great need is for the awakening of the nation to the splendid remedies which the great medical and sanitary experts could devise, if properly organised for the task.

Could only the busy editors of the nation, who guide all movements of humanity and progress, co-operate in bringing this fearful destruction vividly before their readers, no greater good could be accomplished; and in the years to come, many a man now marked for an early death, when celebrating his ninetieth birthday among his children, would thank his stars for a progressive press.

With best wishes and thanking you in advance for whatever co-operation may be rendered in this agitation for inaugurating a National Department of Health, which must go on until the purposes are allowed and the means provided, believe me

J. PEASE NORTON.

Yale University,
November 1, 1906.

IF in a case of suspected appendicitis the point of greatest tenderness is situated at a higher level than customary, it is important after opening the abdomen to always examine the gallbladder for the presence of gallstones.—*International Journal of Surgery*.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 284 FRANKLIN ST., BUFFALO, N. Y.

VOL. LXII.

DECEMBER, 1906.

No. 5

"Unnecessary Operations on Women."

UNDER this title elsewhere in this issue will be found an interesting correspondence between Dr. Arthur Dean Bevan, of Chicago, and Dr. Lewis S. McMurtry, of Louisville. Dr. Bevan's letter was published, as will be observed, in the October number of "Surgery, Gynecology, and Obstetrics," and Dr. McMurtry's answer appeared in the November edition of the same magazine. We republish both letters in this Journal because of the gravity of the charges made by Dr. Bevan against a large and respectable class of the profession, and of the injury likely to result; and because, further, of the complete refutation of the charges by Dr. McMurtry.

The propriety of Dr. Bevan's action in writing such a letter may well be questioned. Is it not quite enough that the profession should be assailed, villified, and held up to scorn from without? Or, must it also be subjected to a similar attack within its own ranks? If Dr. Bevan is aware of the evils which he describes, let him speak specifically, and not condemn a large group of trained gynecologists who are the peers of any other group of specialists in the land, because of the blunders of a few neophytes who may have taken inspiration from a few weeks' attendance at a post-graduate school, and could not be entitled thereby to call themselves specialists in gynecology.

Dr. Bevan is a surgeon of distinction, a teacher in a great medical institution, and chairman of the Council on Medical Education of the American Medical Association. Whatever he may say, therefore, naturally carries great weight, hence all the more caution is required in speaking to the professional world through the columns of a great medical magazine. We are not informed as to his history but he writes like one who has never had ex-

perience in general medicine, but began his surgical career as soon as his undergraduate work was ended. There are many such and they lack the broad training afforded by years of general practice. They are intolerant as a general thing of the views of others, and assume an imperious air in the presence of those not of their inclining.

How completely the charges have been refuted may be determined by a careful reading of Dr. McMurtry's letter. It is a logical, courteous, conclusive answer to the indictment and should make the assailant quite ashamed of his inconsiderate utterances. While, as we have stated, the answer is polite in diction it, nevertheless, betrays indignation, as everyone who knows Dr. McMurtry can observe without even reading between the lines. The profession should be profoundly thankful that the accomplished ex-president of the American Medical Association has taken up the challenge and met every detail at issue in such conclusive fashion. We hope the correspondence will be read with care by general and gynecological surgeons as well as by those who practise general medicine.

Death of Mrs. Potter.

EMILY BOSTWICK, wife of Dr. William Warren Potter, the editor of this JOURNAL, died at the family home, 284 Franklin Street, Buffalo, Wednesday morning, November 28, 1906, in the sixty-eighth year of her age. While she had been in indifferent health for several months the ending came somewhat suddenly, precipitated by cerebral apoplexy with which she was seized about fifty hours before her death. The services of the Protestant Episcopal Church were observed at the house on Friday, November 30, at three o'clock and the remains were incinerated at the Buffalo Crematory, the ashes being interred at Forest Lawn. The bearers were Dr. John O. Roe, of Rochester, and Drs. John Parmenter, Ernest Wende, H. E. Hayd, DeLancey Rochester, W. Scott Renner, William C. Krauss, and Lorenzo Burrows, of Buffalo.

THE POZZI "LIVRE D'OR,"—the souvenir volume presented to Professor S. Pozzi on the completion of 20 years of teaching at the Hospital Broca,—is said (by the *Revue de Gynecologie*) to mark an epoch in the history of gynecology in France. Pozzi's service was the first in France to assert the independence of gynecology and, in order to show the present standing of the science, Faure describes with minute detail an ordinary abdominal hysterectomy as done today in a well equipped operating room. The present record is that 95 per cent. of the patients are cured

by the intervention, and he thinks we have reached the limit of perfection in our technic. The surgeons of A. D. 2000 will not perform an abdominal hysterectomy any better, he declares, than it is done today, although by means of discoveries beyond our ken at present they will not have to perform the operation so frequently as we do. All the articles in this number of the *Revue* are taken from the Pozzi souvenir volume.

DURING the recent meeting of the British Medical Association at Toronto, the Senate of Toronto University conferred the degree of LL.D. on the following members of the association and foreign guests: Dr. T. Clifford Allbutt, Dr. A. H. Freeland Barbour, Sir Thomas Barlow, Sir James Barr, Sir William H. Broadbent, Dr. H. W. Langley Browne, chairman of the council of the association; Mr. George Cooper Franklin, president of the association; Dr. William D. Halliburton, Sir Victor Horsley, Dr. Donald McAlister, president of the medical council of Great Britain; Dr. William J. Mickle, Dr. Louis Lapicque of Paris, Dr. L. Aschoff of Freiburg, Germany, and Dr. William J. Mayo, president of the American Medical Association. Four of the above were also recommended by the Board of Governors of McGill University for the degree of LL.D., these being Dr. T. C. Allbutt, Sir Thomas Barlow, Sir William Broadbent, and Sir Victor Horsley. A number of the recipients of the degree have already been similarly honored by one or more other universities.

AT the last meeting of the American Association for the Advancement of Science at Ithaca, June 30, 1906, a committee was appointed under resolutions of that body, to promote the establishment of a National Department of Health by agitation in all legitimate ways for the purpose of creating a public sentiment in its favor. The naming of the members of the committee is in the hands of Professor Irving Fisher, Yale University, chairman of this section of the American Association for the Advancement of Science. The names of the committee of one hundred selected will be announced shortly. The movement in general already has the support of the principal journals of medicine and hygiene in the United States.

PERSONAL.

DR. J. FORD THOMPSON, of Washington, who went abroad for the benefit of his health sometime ago, has been seriously ill in London and recently submitted to a grave surgical procedure, the nature of which is not known to us at this writing, but which has resulted favorably, according to late cable dispatches. Dr.

Thompson has been in practice about fifty years and for the greater portion of that time has enjoyed the reputation of being the leading surgeon in the capital,—indeed, no one has excelled him in this respect south of the boundary established by Mason and Dixon. Dr. Thompson was bereaved of his wife a year or two ago, which was a great shock to him. Mrs. Thompson was an accomplished woman and a leader in every walk where woman's better influence is needed.

We tender to Dr. Thompson our best wishes for a speedy and complete recovery.

DR. L. S. McMURTRY, of Louisville, read a paper on "Tuberculosis of the Peritoneum" before the Cleveland Academy of Medicine in the new home of the profession in that city Friday evening, November 16, 1906. The medical profession of Cleveland occupies a handsome building equipped with a voluminous library, reading rooms, auditorium, and other conveniences. This makes the Buffalo medical accommodations, by contrast, look poor indeed.

DR. JOHN H. PRYOR, of Buffalo, has been appointed a member of the board of trustees of the New York State Hospital for the treatment of incipient tuberculosis at Raybrook in the Adirondacks, vice Dr. Willis G. Macdonald of Albany, resigned. Dr. Pryor was a pioneer in working for the establishment of this hospital and was appointed a trustee when the board was first created. He was immediately promoted to the office of superintendent, which he filled for about two years. He worked indefatigably to put the hospital on a high professional plane, but resigned because he was unable to carry out his ideals, owing to interferences from Albany. Dr. Pryor's return to the board is a good omen and we believe will result in progressive and efficient management of the affairs of the hospital. He will, of course, continue his professional practice in Buffalo, making periodic visits to the hospital to attend the meetings of the board.

DR. L. W. BREMERMAN, of New York, has been appointed professor of Genitourinary Diseases in the New York School of Clinical Medicine, to fill the vacancy caused by the death of Dr. William K. Otis.

DR. ROLAND O. MEISENBACH, of Buffalo, has removed his residence to 122 Bidwell Parkway. His office remains at 140 Allen street. Hours, 1 to 3. Telephone, Tupper 104.

DR. JAMES H. LEWIS, of Buffalo, has removed his office from 90 North Pearl Street, to 520 Franklin Street, between Allen and North. Hours, 1 to 3; 7 to 8. Telephone, Tupper 61.

DR. ERNEST WENDE, who was appointed sometime ago to be Commissioner of Health of Buffalo, will take office January 1, 1907. Dr. Wendé held the office from 1892 to 1902, and is well qualified to take up its duties again.

DR. FRANCIS E. FRONCZAK has been appointed assistant health commissioner of Buffalo, and will enter upon the duties of the office January 1, 1907.

DR. JACOB GOLDBERG, of Buffalo, has been appointed School Examiner, vice Dr. P. W. Van Peyma who declines reappointment. Dr. Goldberg's duties will commence at the beginning of the New Year.

DR. WILLIAM GAERTNER, of Buffalo, has been appointed a trustee of the Grosvenor Public Library, vice Josiah Jewett, whose term expires March 11, 1907.

DR. D. P. CARD, of Utica, formerly of the Bellevue Hospital staff, New York, has been appointed assistant surgeon of the Soldiers and Sailors Home, at Bath, N. Y., to fill a vacancy caused by the resignation of Dr. Spencer L. Higgins.

OBITUARY.

DR. CLINTON COLGROVE died at Holland, N. Y., October 19, 1906, in the eightieth year of his age. He was born at Sardinia, Erie County, N. Y., June 9, 1827 and was the son of Dr. Bela H. Colegrove, a surgeon of rare ability who had an extensive practice extending over several counties of western New York and into Pennsylvania. Dr. Clinton Colegrove spent several years at Madison (now known as Colgate) University and then came to Buffalo to take up his medical studies. He graduated at the medical department, University of Buffalo, in 1850 and began to practise at Sardinia, N. Y. Later he removed to Fredonia, but upon the death of his wife some years ago he moved to Arkansas, thence to Westfield, Mass., and spent his closing years at Holland. His mother was a sister of William Ives of Buffalo and of the late Dr. James Ives of Strykersville.

Dr. Colegrove was a scholarly man, of great refinement and purity of character. He was eminent rather as a writer than as

a practitioner and contributed many articles in prose and verse to the secular and religious press. He was a man of poetic instincts and his writings excel along these lines.

DR. HARRY HEATH RODMAN, of Buffalo, formerly of New York, died by his own hand while in a temporary fit of despondency, November 12, 1906. He was a native of Brooklyn and graduated from the College of Physicians and Surgeons, Medical Department of Columbia University, in 1895. He recently had an attack of scarlet fever, which left his health impaired and affected his hearing. He submitted to several operations without benefit, and the prospects of ultimate deafness is believed to have so preyed upon his mind as to have prompted him to self destruction. He was a man of promise and leaves a wife in great bereavement.

DR. L. W. CORNWELL, of Alden, N. Y., died at his home in that village October 22, 1906, at an advanced age. He was a graduate of Castleton (Vt.) Medical College and had been in practice nearly fifty years. He is survived by his wife and by a nephew, Dr. B. W. Cornwell, of Williamsville.

SOCIETY MEETINGS.

THE Southern Surgical and Gynecological Association will hold its nineteenth annual meeting at the Hotel Belvidere, Baltimore, December 11, 12, and 13, 1906, under the presidency of Dr. George H. Noble, of Atlanta. Dr. Howard A. Kelly, of Baltimore, is chairman of the committee of arrangements and Dr. William D. Haggard of Nashville is secretary and one or the other of these, according to the nature of the communication, should be addressed concerning the meeting or the program.

THE Medical Society of the County of Niagara held a regular meeting at Lockport, November 20, 1906, at which Dr. W. S. Renner of Buffalo read a paper on Diseases of the Ear. A board of censors was appointed which was instructed to employ an attorney to prosecute illegal practitioners within the jurisdiction of the society. The practice of contracting with lodges, societies, firms or corporations for professional services at reduced fees was condemned and any offender was made liable to expulsion.

THE Medical Society of the State of New York will hold its one hundred and first annual meeting at Albany, Tuesday, Wednes-

day, and Thursday, January 29, 30, and 31, 1907, under the presidency of Dr. Joseph D. Bryant, of New York.

Dr. L. H. Neuman, 194 State Street, Albany, is chairman of the committee on scientific work, to whom all applications for places on the program should be addressed.

THE Buffalo Academy of Medicine held meetings during the months of October and November, 1906, as follows:

Section on Pathology.—Tuesday, Oct. 30, at 8:30 P. M.

Program: Newer conception of the nature and treatment of diabetes, Alfred C. Croftan, Chicago.

Section on Surgery.—Wednesday, November 7, at 8:30 P. M.

Program: (a) Arthritis deformans of the spine, Prescott LeBreton; (b) The present status of lumbar anesthesia, Max C. Breuer; (c) Presentation of a patient showing the results of tendon transplantation in a case of anterior-polio-myelitis, R. O. Meisenbach.

Section on Medicine.—Tuesday, November 13, at 8:30 P. M.

Program: A consideration of the pelvic articulations, Joel E. Goldthwait, Boston, President American Orthopedic Association; discussion opened by R. O. Meisenbach.

Section on Pathology.—Tuesday, November 20, at 8:30 P. M.

Program: A lecture by Dr. Loeb of the University of Pennsylvania, illustrated with lantern slides.

Section on Obstetrics and Gynecology.—Tuesday, November

27, at 8:30 P. M. Program: (a) Obstetric lacerations, P. W. Van Peyma; (b) Management of occipital presentations, Earl P. Lothrop; (c) Reflex dyspepsias due to abdominal and pelvic diseases, Herman E. Hayd.

THE Mississippi Valley Medical Association at its recent annual meeting held at Hot Springs, Ark., elected the following-named officers: president, H. Horace Grant, Louisville; first vice-president, G. A. Herbert, Hot Springs, Ark.; second vice-president, T. C. Witherspoon, Saint Louis; secretary, Henry E. Tuley, (reelected) Louisville; treasurer, S. O. Stanton (reelected) Chicago. The next annual meeting will be held at Columbus, in October, 1907.

THE Association of Lehigh Valley Railway Surgeons at its recent annual meeting held in New York elected the following named officers: president, Grosvenor R. Trowbridge, Buffalo; secretary, J. C. Zern, Wilkesbarre, Pa. The next meeting will be held at Wilkesbarre.

THE Medical Society of the County of Wyoming at its recent meeting held at Castile in October, elected the following named officers: president, F. E. Bliss, Warsaw; vice-president, Mary Greene, Castile; secretary (reelected) B. H. Humphrey, Silver Springs.

COLLEGE AND HOSPITAL NOTES.

THE Buffalo Homeopathic Hospital is in need of greater accommodations and increased facilities for work. For years the staff of physicians and nurses have struggled under the most serious lack of equipment and accommodations, with results that thoroughly testify to their skill and devotion. Now, however, plans have been formulated that will require \$100,000 and call for the sale of the present hospital at Cottage and Maryland streets, the purchase of a new site and the erection of a modern hospital building, in some place where the requisite quiet can be secured, with, at the same time, proper street car communication.

Up to date \$65,000 have been subscribed and the remaining \$35,000 will, it is hoped, be forthcoming within a short time.

Subscriptions may be addressed to H. E. Montgomery, Court and Wilkenson streets. Subscription blanks can also be obtained of Dr. George T. Moseley, chairman of the building fund committee, 202 Delaware avenue.

DR. L. DUNCAN BULKLEY is giving the eighth series of Clinical Lectures on Diseases of the Skin, in the out-patient hall of the New York Skin and Cancer Hospital, which commenced Wednesday afternoon, November 7th, 1906, at 4:15 o'clock. The course is free to the medical profession.

THE Frontier Hospital is the name given for a new hospital which is proposed to be established at the corner of Main and Riley streets, Buffalo. Several business men are promoting the scheme and it is intended to organise and incorporate a company. According to plans published in the newspapers the hospital will be conducted on the club order, each member paying two dollars for a certificate entitling the holder, in case of serious injury or disability, to ambulance service, all surgical treatment, including bandages, dressing, medicine, bed, board and nursing until recovery, for one year from date of the issuing of the certificate. For diseases not arising from accidents, a nominal charge of \$1 a day will be made for bed, board and attendances.

Family certificates, costing \$5, will give husband, wife and children of the family under 16 years old, the same privileges for a period of one year.

BOOKS AND AUTHORS.

American Practice of Surgery. A Complete System of the Science and Art of Surgery by representative surgeons of the United States and Canada. Edited by **Joseph D. Bryant, M.D.**, and **Albert H. Buck, M.D.**, New York. Complete in eight volumes. Vol. I. Imperial octavo, pp. 818, with 294 illustrations in the text. New York: William Wood and Company. 1906. (Price, Cloth: \$7.00).

The first volume of this colossal treatise on surgery makes a most favorable impression. It is a book of five parts, exclusive of the introduction which deals with the evolution of American surgery. This interesting historical résumé is prepared by Stephen Smith, who is supremely qualified for the task. He has condensed the facts most discreetly and makes a continuous story in abstract which is illustrated by wood cuts of many men eminent as surgeons in their day.

The five parts deal with surgical pathology, complications and sequelæ, general surgical diagnosis, general surgical treatment, and general surgical prognosis. The contributors are Leonard Woolsey Bacon, Joseph Colt Bloodgood, Harlow Brooks, Joseph D. Bryant, Walter J. Dodd, Harvey R. Gaylord, Preston M. Hickey, Theodore A. McGraw, James E. Moore, Albert George Nicholls, Edward Hall Nichols, Robert B. Osgood, Paul Monroe Pilcher, Stephen Smith, and Aldred Scott Warthin. We shall not undertake an exhaustive analysis of this remarkable volume, but content ourselves with a mention of some of its distinctive features.

We have already alluded to the evolution of surgery and desire to emphasise the fact that it is one of the finest bits of history in condensed form that we have seen. The second point to which we invite attention is the fact that the formation of the entire structure of written surgery, as contemplated in the scheme of this work, is laid in this volume. The topics presented pertain to the foundation of the splendid superstructure which is to be built by the seven volumes to follow. In other words, this book is devoted to the discussion of those underlying principles which constitute the basis of surgical science.

The third feature, is the monograph relating to tumors and tumor formation. This article is written by Albert G. Nicholls, of Montreal, and presents the topic in the most modern light, reflecting the newer pathology and classification of tumors, and presenting their histology in clearer perspective than has yet been done in a general treatise on surgery. It seems important that the classification herein set forth should be adopted by teachers as the simplest and easiest understood yet offered. The importance of uniformity cannot be over-accentuated, and it should be attained as nearly as may be by all instructors.

Finally, we direct attention to the section on general diagnosis which is presented by the senior editor. That accuracy in diagnosis lies at the threshold of all successful treatment, is a medical axiom that needs no elaboration here. Dr. Bryant has shown

by his teachings and writings for more than twenty-five years his appreciation of diagnostic precision and has in a previous treatise laid emphasis upon this topic. It has remained for him, however, to discuss the subject here with more detail, and he has developed the refinements of method and simplicity of application with a graceful force that betrays the master. Moreover, it is a practical delineation of a topic with which every practitioner should familiarise himself, even to a degree of perfection in scientific technic not hitherto understood or appreciated.

Other important features could be taken up with profit but it is not well, in these days of hurry and worry, to overburden the reader with description. Bloodgood's article on shock, however, contains so much of value that we must not close this sketch without reference to it. Especially should his remarks on operations during shock be remembered. The mechanical construction of the book is beyond criticism and the illustrations are works of art. We cannot doubt that this treatise will receive a degree of professional favor hitherto unaccorded any surgical work, for the reason that, judging by this volume, it will deserve it.

The Medical Record Visiting List or Physicians Diary for 1907.
New York: William Wood and Company, Medical Publishers.

This excellent pocket diary enters the field early in the campaign, having come to hand during the late November days. It is one of the most compact, useful, and practical of visiting lists and is, withal, a handsome book. It may not be inappropriate to mention its contents for the information of those who have not seen former editions, which may be summed up as follows: calendar; estimation of the probable duration of pregnancy; approximate equivalents of temperature, weight, capacity, measure, etc.; maximum adult doses by the mouth, in apothecaries' and decimal measures; drops in a fluid drachm; solutions for subcutaneous injection; solutions in water for atomization and inhalation; miscellaneous facts; emergencies; surgical antiseptics; disinfection; dentition; table of signs; visiting list with special memoranda; consultation practice; obstetric engagements; record of obstetrical practice; record of vaccination; register of deaths; nurses' addresses; addresses of patients and others; cash account.

The prices of the regular lists are: for 60 patients a week, with or without dates, handsomely selected red or black, morocco binding, \$1.50; for 30 patients a week, with or without dates, same style, \$1.25; also a few special 90 patient lists, \$2.00. A number of novelties are offered at special prices; running even as high as \$4.00 a book. Also, for stamping name in gold an extra charge of twenty-five cents is made, or for name and address fifty cents. Orders should be placed promptly to avoid delay in executing them. No physician who values his time and knows how to economise it, need be told of the great usefulness of this beautiful pocket memorandum book, diary, and visiting list.

Progressive Medicine, Vol. VIII, No. 3, September, 1906. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 298 pages, 13 illustrations. Lea Brothers & Co., Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00; carriage paid to any address).

This number opens with an instructive review of the diseases of the thorax and its viscera, including the heart, lungs, and bloodvessels, by William Ewart. He deals more particularly with the role of the lymphatic system, the early signs of pulmonary tuberculosis, the prevention of this dread malady and the treatment of tuberculosis. The vaccine method, as recommended by Wright and Urwick, introduces a perspective of possibilities, which may reasonably prove attractive to the clinician. The other reviews are, dermatology and syphilis, by William S. Gottheil; obstetrics, by Richard C. Norris; and diseases of the nervous system, by William G. Spiller. The abstract relating to the toxemia of pregnancy is one of great interest; indeed, the obstetric review is replete with valuable material. The September number maintains the reputation of this digest, heretofore established, for quality, clearness, and clinical importance.

Human Sexuality. A Medico-Literary Treatise on the Laws, Anomalies, and Relations of Sex, with special reference to contrary sexual desire. By J. Richardson Parke, M.D., (Late Acting Assistant Surgeon, U. S. Army). Octavo, 476 pages. Professional Publishing Company, Philadelphia. 1906. (Price, \$3.00 net).

This work is a monument of industry. The author has studied the subject as it exists in lands civilised and uncivilised and presents to the reader much that is new as well as very much that is old and threadbare. The rehash of personal experience of perverts is given a prominent place in the volume. The reader who looks for variety of sexual customs will find it here described. A very complete list of authorities on the subject is given and we can recommend the book as being thorough and scientific. We cannot say, however, that it is helpful. Not a word do we find which can be of the least benefit to the afflicted. Really, we have had enough of printed experience of sexual custom and sexual crime. On the other hand, we have not had sufficient help in the treatment of these unfortunates.

J. W. P.

The Physicians' Visiting List (Lindsay and Blakiston's) for 1907. Fifty-sixth year of its publication. Philadelphia: P. Blakiston's Son and Company (Successors to Lindsay and Blakiston). 1906.

This veteran visiting list is out early, thereby indicating that it keeps young, even with more than half a century of years upon its shoulders. It is, withal, one of the most complete and serviceable of its class, meeting every demand of the most exact-

ing practice. It is published in several forms, ranging in price from \$1.00 to \$2.25, according to size and make-up. The dose table which it contains has been revised in accordance with the pharmacopeia of 1900, lately issued. We are always glad to greet this during its annual visitations, as it is the first one we were privileged to possess, now nearly fifty years ago. It is difficult to see how it could be improved, as now made up, and we commend it as one of the best pocket memorandum books in the market.

Walter Reed and Yellow Fever. By **Howard A. Kelly**, M.D., Professor of Gynecological Surgery in Johns Hopkins University. 12mo., pp. 293. Illustrated. New York: McClure, Phillips & Co. 1906.

The story of Walter Reed's life, as portrayed by his friend, the author, is a touching tribute of affection to the memory of the man who contributed as much as any American physician to the records of preventive medicine. Dr. Kelly has done a great service to the medical world in presenting in such entertaining form, a biography of this remarkable man which, incidentally, relates also to the history of yellow fever. This subject is dealt with most interestingly and is in reality a valuable contribution to its literature. Never, hereafter, in the history of the world can this infectious disease be mentioned, unless to be coupled with the name of the man who, more than any other person, contributed to its practical annihilation,—Walter Reed.

This story should be read by everyone interested in the achievements of American Medicine. It is at once a tribute to the memory of a brilliant man, and an inspiration to persistent effort. Every student of medicine in particular should read it and every intelligent citizen should familiarise himself with "Walter Reed and Yellow Fever."

Proceedings of the American Medico-Psychological Association, at the sixty-first annual meeting, held at San Antonio, Texas, April 18-21, 1905. **Charles W. Pilgrim**, M.D., Secretary. Baltimore: Printed for the Association by the Friedenwald Company. 1905.

This, the oldest special medical society of national constituency, issues an annual volume of instructive interest. This one is a standard octavo of 384 pages, bound in paper, and contains many papers of scientific interest, especially to alienists. Dr. Arthur W. Hurd, of Buffalo, Superintendent of the State Hospital, contributes a paper on Korsakoff's psychosis. The president, Dr. T. W. J. Burgess, of Montreal, chose for the subject of his address, "The Insane of Canada." It appears from his statistics that there were in 1901, in the Dominion of Canada, 16,622 persons of unsound mind, a ratio of 3.125 in every thousand of population. The entire paper contains much of interest, and the whole volume is full of good material.

International Clinics. A quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by **A. O. J. Kelly, A.M., M.D.,** Philadelphia. Volume II. Sixteenth series. 1905. Philadelphia and London: J. B. Lippincott Co. (Cloth, \$2.00).

The "clinics" seem to grow better by age; at all events this number is one of the very best of the series. The topics are treatment, four articles; medicine, eight articles; pediatrics, one article; neurology, one article; surgery, five articles; obstetrics and gynecology, five articles; and laryngology, one article. De Lancey Rochester, of Buffalo, contributes an instructive paper on the prognosis and treatment of the chronic valvular diseases of the heart. W. A. Newman Dorland presents an elaborate paper, well illustrated, on the female perineum and its repair; and Louis Frank, of Louisville, presents two cases of ectopic pregnancy with unusual features. The entire book is most entertaining.

Case Teaching in Medicine. A series of graduated exercises in differential diagnosis, prognosis, and treatment of actual cases of disease. By **Richard C. Cabot, A.B., M.D.,** (Harvard) Instructor in Medicine in the Harvard Medical School, and physician to outpatients at the Massachusetts General Hospital. Octavo, 220 pages. Boston: D. C. Heath & Co. 1906. (Price: Cloth, \$1.50).

The object of this book is to aid the teacher in training his pupils to digest the material gathered from the clinic,—the author says "to think clearly, cogently, and sensibly about the data gathered by physical examination." Cabot is a teacher of experience and a logical thinker; he knows what a pupil needs and is fully capable of preparing the best for him. His book represents a plan of teaching that has proved its value, not only in his own hands but by other teachers of capability. The method is new and is worthy of further trial. Each alternate page is blank, to admit of entering notes; the book has three indexes,—one of signs and symbols, one of symptoms arranged by systems and organs, and one of diagnosis. We commend it to teacher and pupil.

Transaction of the American Roentgen Ray Society. Sixth annual meeting, held at Baltimore, September 28, 29 and 30, 1905. George C. Johnston, M.D., Secretary.

This society was organized about five years ago, and has 237 members, three of whom—namely, Drs. John T. Pitkin, Rosewell Park, and A. W. Bayliss, reside in Buffalo. The volume, a standard octavo of 224 pages and some advertisements, is well printed, contains a number of skiagraphs and other illustrations, and fairly represents the "specialty" of which it is the exponent.

The Health-Care of the Baby. A Handbook for Mothers and Nurses, by **Louis Fischer, M.D.**, 12mo., 166 pages. New York and London: Funk & Wagnalls Co. 1906. (Price: 75 cents, net.; by mail, 82 cents).

Dr. Fischer is an experienced teacher at the New York Post-graduate medical School and Hospital and a clinician in pediatrics of successful practice. He is also the author of other books on kindred topics to this; therefore, whatever he says is entitled to full credence. The present book was prepared especially for mothers and nurses, and admirably handles the subjects of feeding in health and disease; gives directions for the management of fever, and is a guide during such diseases as measles, croup, skin diseases, etc., while it gives ample advice in cases of accidents, poisoning, and the like. The correction of bad habits, and the management of rashes, have received due consideration. It is an excellent book to put into the hands of younger mothers, whom it may save from many an anxious hour.

Transactions of the Southern Surgical and Gynecological Association. Vol. XVIII. Eighteenth Session, held at Louisville, Ky., December 12-14, 1905. Octavo, pp. 456. Edited by **William D. Haggard, M.D.**, Secretary. Philadelphia: William A. Dornan. 1906.

This handsome volume attests the virility and the excellent work done by this association at its eighteenth annual meeting held at Louisville last year. The president, Dr. Lewis C. Bosher, of Richmond, as the subject of his address, discoursed upon the proper training for the practice of surgery. The theme was happily chosen and masterfully dealt with. The papers one and all are of a high order, and the discussions are able; they make the salient features of the papers stand out in strong relief. The volume is a credit to the medical profession of the south, for whose benefit the association was organized. The secretary has shown skill in editing the book.

Surgical Suggestions. Practical Brevities in Surgical Diagnosis and Treatment. By **Walter M. Brickner, M.D.**, Chief of Surgical Department, Mount Sinai Hospital Dispensary, New York; Editor *American Journal of Surgery*; and **Eli Moschowitz, M.D.**, Assistant Physician, Mount Sinai Hospital Dispensary, New York. Duodecimo: 60 pages. New York: Surgery Publishing Co. 1906. (Cloth, 50 cents).

This small volume is compiled from the surgical suggestions published in the *American Journal of Surgery* during the year 1905. It is convenient to have them at hand in this separate form, for reference when lack of time prevents the consultation of textbooks. The suggestions are epigrammatic in form and will be found pleasant reading during an idle half-hour, when concentrated study is not desirable. They are hints, too, to a further examination of topics upon which detailed information may be wanted.

Introduction to Materia Medica and Pharmacology, including the Elements of Medical Pharmacy, Prescription Writing, Medical Latin, Toxicology and Methods of Local Treatment. By **Oliver T. Osborne, A.M., M.D.**, Professor of Materia Medica, Therapeutics and Clinical Medicine in Yale University. 12mo., 167 pp. Lea Brothers Co., Philadelphia and New York. 1906. (\$1.00).

To minister to the sick,—to cure the afflicted,—is the ultimate object of the great majority of medical students. This small volume will tend to make easier the accomplishment of this general purpose. It is well arranged by a competent teacher. He says just enough on prescription writing, seeking to give hints rather than complete instruction on the subject. The suggestions relating to local or special treatments are well chosen as, indeed, are all the several topics dealt with. It can be carried in the pocket, and thus may become a companion at odd times when time must be economised.

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of **Gustavus P. Head, M.D.**, Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. III. The Eye, Ear, Nose, and Throat. Edited by **Casey A. Wood, M.D.**, **Albert H. Andrews, M.D.**, and **Gustavus P. Head, M.D.** Chicago: The Year Book Publishers. 1906. (Price, \$1.50; entire series, \$10.00).

It is difficult to keep pace with the ophthalmic literature of a year, but these editors have made the most of their opportunity. Ophthalmologists seem to be voluminous writers, and their branch is an important one. For these and perhaps other reasons the ophthalmic literature of even a single year is massive. Dr. Wood has devoted considerable space to the literature relating to ocular symptoms in general diseases, thus making the book of special interest to the general practitioner. The ear, nose, and throat literature has been judiciously plowed and harrowed, so that the entire volume is one of general practical value.

X-Rays in General Practice. **A. E. Walter, Captain I. M. S.**, Superintendent of the X-Ray institute of India. Duodecimo, 174 pages. Illustrated. London: John Lane, The Bodley Head. New York: John Lane Company. 1906.

The author of this work has achieved fame in His Majesty's service in India as a medical officer. He has improved his opportunity to study the effect of x -rays and apply them in practice. The office of Superintendent of the X-Ray Institute afforded ample opportunity for the development of this special therapeutic and diagnostic measure and method.

The book is written on conservative lines and does not make extravagant claims for the x -ray treatment. The descriptive text is clear and the illustrations give it adequate explanation. On the whole it is one of the best manuals we have seen relating to this topic. It is one of a series of practitioners' handbooks issued by John Lane, of London and New York.

Squibbs Materia Medica. Part I. A complete alphabetical list of all the Squibb products, embracing the articles in the U. S. Pharmacopeia (8th Revision) and the National Formulary, together with the non-official chemicals, pharmaceuticals, and newer remedies in general use. Part II. Squibb's Medicinal Tablets, etc. A reliable and comprehensive handbook for the Physician and the Pharmacist. 1906 edition. Brooklyn: E. R. Squibb & Sons.

This is a most convenient book of reference for the busy doctor. It gives the more important data concerning the nature, source, physical and therapeutical properties, doses, antidotes, and other essentials of all the Squibb preparations and many other drugs of the pharmacopeia. Included, also, are the non-official and newer remedies. Besides, it gives a list of prices which is of importance. It will be sent to those who may not have received it, on application. This house is too well known to make further comment requisite.

Transactions of the Section on Obstetrics and Diseases of Women, of the American Medical Association at the Fifty-sixth annual session, held at Portland, Ore., July 11-14, 1905. Chicago: American Medical Association Press. 1905.

At the meeting of the section, the proceedings of which are recorded in this book, Dr. C. L. Bonifield, of Cincinnati, was chairman, and the work which he developed for the section is of great value. As the meeting was held at the far side of the continent, interest might be expected to lessen, but such seems not to have been the case. It is a good plan to publish these proceedings in separate form, so that they may become accessible to those most interested, and who have scant time to search the files of a weekly journal for the desired material.

Thirty-second Annual Report of the State Board of Health of Michigan, for the fiscal year ending June 30, 1904. Henry B. Baker, M.D., Secretary. Lansing: Wynkoop Hallenbeck Crawford Company, State Printers.

Michigan for many years has been one of the foremost states in its administration of public health affairs. This volume is, perhaps, less pretentious than some of its predecessors; nevertheless, it contains much of value to the sanitarian. The section dealing with consumption, with its tables and statistics, gives the impression that the subject is receiving most scientific attention by both county and state sanitary officers. The secretary has prepared his material with great care.

Transactions of the Medical Association of the State of Alabama. (The State Board of Health). Organized 1847. Meeting of 1905 held at Montgomery, April 19-22, 1905. Montgomery: Brown Printing Company. 1905.

The annual volumes of transactions of this association are well edited and well printed; besides, they always contain much of interest even for physicians living in other states. The annual

oration was delivered on this occasion by Dr. Seale Harris, the subject being Fame's Temples, and in course of which he advocated the name of a physician for a place in the National Hall of Fame. The Jerome Cochrane lecture was delivered by Dr. Robert Abbe, of New York, whose subject was "The Problems of Surgery." A large and interesting group of scientific papers fills the body of the book, after which the register is printed, giving the names of the physicians in the state by counties, and a table of contents closes the volume.

Blakiston's Quiz Compends. A Compend of Obstetrics, especially adapted to the use of Medical Students and Physicians. By **Henry G. Landis**, A.M., M.D., late professor of obstetrics and diseases of women in Starling Medical College, Columbus, O. Revised and edited by **William H. Wells**, M.D., demonstrator of clinical obstetrics in Jefferson Medical College, Philadelphia. Eighth edition, illustrated. Philadelphia: P. Blakiston's Son & Co. 1906. (Price: \$1.00 net).

The questions in this compend were prepared by a master and have stood the test of time. They bring out the essentials of the obstetric art and serve not only the purposes of the student, but are excellent reminders for the practitioner. Frequent revisions have served to keep the questions and answers abreast of the science as well as the art. The last three editions have been revised by Dr. Wells, who has proved equal to the important task of keeping the work fresh, and maintaining it at the highest possible mark.

Annual Report of the Surgeon General of the Public Health and Marine Hospital Service of the United States, for the fiscal year ended 1905. By **Walter Wyman**, Surgeon General. Washington: Government Printing Office. 1906.

The student of public health always finds much of interest in Surgeon-General Wyman's reports. To prevent the immigration of persons afflicted with infectious diseases, to guard against the introduction of yellow fever into our domain, to care for the hygiene and minister to the welfare of marines, to aid the quarantine authorities in divers ways,—these and many other functions devolve upon this important service. All these matters are considered in this report, as well as many others which we are unable to detail at this time,—the whole making an important and valuable contribution to our public health literature.

Second Annual Report of the Henry Phipps Institute; for the Study, Treatment and Prevention of Tuberculosis. February, 1, 1904, to February 1, 1905. **Lawrence F. Flick**, M.D., Medical Director. Published by the Henry Phipps Institute, Philadelphia: 1906.

This volume, bound in paper, contains among other valuable material an account of the work of the institute during its second year; a review of the subject of immunisation in tuberculosis; a preliminary report on the Maragliano serum treatment; and a

report of some of the scientific work done by members of the staff of the institute during the year. It contains 452 pages of standard octavo text and, altogether, is one of the ablest if not the most valuable reports of institution work we have seen. Scant justice can be given to such a painstaking and useful report in the narrow space at command, but every person interested in the study of the tuberculosis problem should read or examine it with great care.

Golden Rules of Surgery. Aphorisms, Observations and Reflections on the Science and Art of Surgery. Being a Guide for Surgeons and those who would be Surgeons. By **Augustus Charles Bernays**, A.M., M.D., Heidelberg, M.R.C.S. England. 8 vo., pp. 232. St. Louis: The C. V. Mosby Medical Book Co. 1906, (Price \$2.50).

This is a book of rules,—golden and otherwise,—which will be found of interest to the younger physicians. It would be somewhat confusing, however, for him to memorise the “rules” that apply to the various conditions touched upon. It is rather iconoclastic to “do away” with the term inflammation; and to substitute for it “tissue-unrest,” is clumsy. The tendency nowadays is to simplify, and to “advance backward” in such crab-like fashion does not conform to the spirit of the age. The book is a curiosity that will amuse as well as instruct.

Eczema. A consideration of its course, diagnosis and treatment, with 146 prescriptions. By **Samuel Horton Brown**, M.D., Assistant Dermatologist in the Philadelphia Hospital. 12 mo. pp. 105. Philadelphia: P. Blakiston's Son & Co. 1906. (Price, \$1.00).

It is a good plan to have such a monograph as this relating to so common a malady as eczema and which manifests itself in such varieties, within easy reach. Rarely have we seen so much useful information upon eczema presented in such an understandable fashion. Of course, one must know something of the clinical manifestations of the disease by personal observation, before he can apply all that the author has given in this compact little volume. The prescriptions are of the better class and can be made available by many general practitioners who almost always see these cases first. We commend the book to all such in particular.

A Compend of Operative Gynecology. Based on Lectures in the Course of Operative Gynecology on the Cadaver. Delivered by **William Seaman Bainbridge**, M.D., Adjunct Professor of Operative Gynecology on the Cadaver, New York Post-Graduate Medical School and Hospital. In Collaboration with **Harold D. Meeker**, M.D., Instructor in Operative Gynecology on the Cadaver, New York Post-Graduate Medical School and Hospital. 12mo. 76 pages. The Grafton Press, New York. (Price, \$1.00).

These memoranda,—it seems to us that is the best term to apply to the groupings herein made by the author,—are of special

service to younger members of the profession. They serve to refresh and to keep burnished the mental processes for both clinical application and for examination purposes. We rarely see so scientific a condensation of facts that are needed in busy practice, as have been gathered into this small volume.

Blakiston's Quiz Compend. *Materia Medica, Therapeutics and Prescription Writing.* By **Samuel O. L. Potter, M.D.**, formerly Professor of the Principles and Practice of Medicine in the Cooper Medical College of San Francisco. Seventh edition, revised and enlarged. Philadelphia, P. Blakiston's Son & Co. 1906. (Price, \$1.00).

Seven editions ought to prove the value of this compend, without further comment by journalists. Nevertheless, it is well to be reminded from time to time of the existence of such a useful presentation of the essentials of this practical topic. Students have obtained much aid from its pages and practitioners have found it a useful reminder. It can be carried in the pocket and thus be made available in an emergency of practice or for the examinations.

BOOKS RECEIVED.

Practical Dermatology. A condensed manual of diseases of the skin. By **Bernard Wolff, M.D.**, Clinical Professor of Diseases of the Skin in the Atlanta College of Physicians and Surgeons. Large 8 vo., pp. 288. Illustrated. Chicago: Cleveland Press. 1906.

Diseases of the Stomach. By **Max Einhorn, M.D.**, Professor of Clinical Medicine at the New York Post-Graduate Medical School and Hospital. Fourth revised edition. Octavo, pp. 559. Illustrated. New York: William Wood & Co. 1906. (Price, \$3.50).

Modern Clinical Medicine. Vol. III. *Diseases of the Digestive System.* Edited by **Frank Billings, M.D.**, Professor of Medicine, University of Chicago; Professor of Medicine and Dean of Faculty, Rush Medical College. Octavo, pp. xvi-824. With 45 illustrations. New York and London: D. Appleton & Co. 1906.

Surgery. *Its Principles and Practice.* By various authors. Edited by **William Williams Keen, M.D.**, Professor of the Principles of Surgery and of Clinical Surgery in Jefferson Medical College, Philadelphia. In 5 volumes. Volume I. *History, Surgical Physiology, Surgical Pathology, Infections, Tumors, Wounds.* Large Octavo, pp. 983. With 261 text illustrations and 17 colored plates. Philadelphia and London: W. B. Saunders Co. 1906. (Price, cloth, \$7.00; half morocco, \$8.00, net prices).

Blakiston's Quiz Compend. *Genitourinary Diseases and Syphilis.* By **Charles S. Hirsch, M.D.**, Assistant in the Genitourinary surgical department, Jefferson Medical College. 12mo., pp. 351. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1906. (Price, \$1.00).

A Syllabus of Materia Medica. Compiled by **Warren Coleman, M.D.**, Professor of Clinical Medicine in Cornell University Medical College. Third edition. pp. 186. New York: William Wood & Co. 1906. (Price, \$1.00).

A Treatise on the Motor Apparatus of the Eyes. Embracing an Exposition of the Anomalies of the Ocular Adjustments and their Treatment, with the Anatomy and Physiology of the Muscles and their Accessories. By George T. Stevens, M.D., Ph.D. Illustrated with 184 engravings, some in colors. 496 pages, Royal Octavo. Philadelphia: F. A. Davis Company. 1906. (Price, \$4.50 net).

A Primer of Psychology and Mental Disease for use in Training Schools for Attendants and Nurses and in Medical Classes, and as a ready reference for the practitioner. By C. B. Burr, M.D., Medical Director of Oak Grove Hospital (Flint, Mich.) for Mental and Nervous Diseases. Third edition. Revised; with illustrations. Pages viii-183, 12mo. Philadelphia: F. A. Davis Company, (Price, \$1.25 net).

The Ear and its Diseases. A textbook for students and physicians. By Seth Scott Bishop, B.S., M.D., LL.D., Honorary President of the Faculty and Professor in the Post-Graduate School and Hospital of Chicago; Surgeon to the Post-Graduate Hospital and to the Illinois Hospital, etc. Illustrated with 27 Colored Lithographs and 200 Additional Illustrations. Royal Octavo, 440 Pages. Philadelphia: F. A. Davis Company. (Price, \$4.00 net).

Saunders' Pocket Medical Formulary. By William M. Powell, M.D., author of "Essentials of Diseases of Children." Containing 1831 formulas from the best known authorities. With an appendix containing Posologic Tables, Formulas and Doses for Hypodermic Medication, Poisons and their Antidotes, Diameters of the Female Pelvis and Fetal Head, Obstetric Table, etc., etc. Eighth Edition, Adapted to the new (1905) Pharmacopeia. Philadelphia and London: W. B. Saunders Company, 1906. In flexible morocco, with side index, wallet and flap. (\$1.75 net).

Prevalent Diseases of the Eye. By Samuel Theobald, M.D., Clinical Professor of Ophthalmology and Otology, Johns Hopkins University. Octavo of 551 pages, with 219 text-illustrations, and 10 colored plates. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$4.50 net; half morocco \$5.50 net).

A Textbook on the Practice of Gynecology. By W. Easterly Ashton, M.D., LL.D., Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. Third Edition, thoroughly revised. Octavo of 1096 pages, with 1057 original line drawings. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$6.50 net; half morocco, \$7.50 net).

Abdominal Operations. By B. G. A. Moynihan, M.S. (London), F.R.C.S., Senior Assistant Surgeon at Leeds General Infirmary, England. Second Revised Edition, greatly Enlarged. Octavo of 815 pages, with 305 original illustrations. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$7.00 net; half morocco, \$8.00 net).

The American Illustrated Dictionary. All the terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry and kindred branches; with over 100 new tables. By W. A. Newman Dorland, M.D., Fourth Revised Edition. Octavo of 836 pages, with 293 illustrations, 119 of them in colors. Philadelphia and London: W. B. Saunders Company, 1906. (Flexible Morocco, \$4.50 net; thumb indexed, \$5.00 net).

Diet in Health and Disease. By Julius Friedenwald, M.D., Clinical Professor of Diseases of the Stomach in the College of Physicians and Surgeons, Baltimore; and John Ruhrah, M.D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, Baltimore. Second Revised Edition. Octavo of 728 pages. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$4.00 net; half morocco, \$5.00 net).

Photocopy (Skiascopy or Retinoscopy). By Mark D. Stevenson, M.D., Ophthalmic Surgeon to the Akron City Hospital; Oculist to the Children's Home, Akron, Ohio. Octavo of 126 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$1.25 net).

Obstetrics for Nurses. By Joseph B. DeLee, M.D., Professor of Obstetrics in the Northwestern University Medical School, Chicago. Second Revised Edition. 12mo., 510 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$2.50 net).

The Technic of Operations upon the Intestines and Stomach. By Alfred H. Gould, M.D., Boston, Massachusetts. Octavo volume, containing 190 beautiful original illustrations, some in colors. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$5.00 net; half morocco, \$6.00 net).

A Textbook of Obstetrics. By Barton Cooke Hirst, M.D., Professor of Obstetrics in the University of Pennsylvania. Fifth Revised Edition. Octavo of 915 pages, with 753 illustrations, 39 in colors. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$5.00 net; half morocco, \$6.00 net).

Studies in the Psychology of Sex—Erotic Symbolism, The Mechanism of Detumescence, The Psychic State of Pregnancy. By Havelock Ellis. Pages x-285. Sold only by Subscription to Physicians, Lawyers, and Scientists. F. A. Davis Company, Philadelphia. (\$2.00 net).

Transactions of the American Otological Society. Thirty-ninth annual meeting held at New York, June 26 and 27, 1906. F. E. Jack, M.D., Boston, Secretary.

The Practical Medicine Series of Year Books. Ten volumes. Series of 1906. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. VII. Pediatrics and Orthopedic Surgery, edited by Drs. Isaac A. Abt and John Ridlon. Chicago: The Year Book Publishers. Series, 1906. (Price, \$1.25; entire series, \$10.00).

Retinoscopy in the Determination of Refraction at One Meter distance with the Plane Mirror. By James Thorington, M.D., Author of "Refraction and How to Refract," etc. Fifth edition. pp. 67. With 54 illustrations. Philadelphia: P. Blakiston's Son & Co. 1906.

The Medical Directory of New York, New Jersey and Connecticut. Published by the Medical Society of the State of New York. Volume VIII. 1906.

Genitourinary Diseases and Syphilis. By Henry H. Morton, M.D., Clinical Professor of Genitourinary Diseases in the Long Island College Hospital. Illustrated with 158 Half-tone and Photo-

engravings and 7 Full-page colored plates. Second Edition, Revised and Enlarged. Royal Octavo, 500 Pages Philadelphia: F. A. Davis Company. 1906. (Price, \$4.00 net).

Atlas and Textbook of Human Anatomy. Volume I. By Professor J. Sobotta, of Wurzburg. Edited, with additions, by J. Playfair McMurrich, A.M., Ph.D., Professor of Anatomy at the University of Michigan, Ann Arbor. Quarto volume of 258 pages, containing 320 illustrations, mostly in colors. Philadelphia and London: W. B. Saunders, 1906. (Cloth \$6.00 net; half morocco, \$7.00 net).

Medical Epitome Series. Edited by Victor C. Pederson, M.D., Lecturer in surgery in the New York Polyclinic Medical School and Hospital. Pathology, by John Stenhouse, M.D., and John Ferguson, M.D. 12 mo. pp. 285. Illustrated. Philadelphia and New York: Lea Bros. & Co. (Price, \$1.00).

LITERARY NOTES.

THE *Therapeutic Gazette*, the *Medical Age* and *Medicine* will be consolidated January 1, 1907, and become one magazine. The publication will be edited by Drs. Hobart A. Hare and Edward Martin, who have been editors of the *Therapeutic Gazette* for several years. The title of the consolidated magazine will be *The Therapeutic Gazette*, incorporating *Medicine* and the *Medical Age*. The subscription price will be \$2.00 a year. E. G. Swift is the publisher and Harry Skillman is the business manager.

ST. LOUIS *Medical and Surgical Journal* has combined with the *Medical Mirror*. The former journal is absorbed in the latter.

MISCELLANY.

CHARLES S. FOWLER, Chief Examiner, announces that the State Civil Service Commission will hold examinations December 15, 1906, for the following positions: Appraiser of Forest Lands, \$600 to \$1080 and expenses; Architectural Draughtsman, \$15 to \$25 a week; Assistant Civil Engineer, \$5 to \$6 a day; Bridge Designer, \$1500 to \$1800; Bridge Draughtsman, \$1200 to \$1500; Chemist, Department of Agriculture, \$1200; Civil Engineering Draughtsman, \$4 to \$5 a day; Fireman, Onondaga County Service, \$2 a day; Law Library Assistant, State Library, \$600 to \$720; Librarian, Department of Labor, \$900; Superintendent of Industries, State Prisons, \$1500; Tracer, \$40 to \$75 a month.

The last day for filing applications for these positions is December 10th. Full information and application forms for any of these examinations may be obtained by addressing the Chief Examiner of the Commission at Albany.

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

JANUARY 1907.

No. 6

ORIGINAL COMMUNICATIONS.

Reciprocity in Medical Licensure.¹

By ALBERT VANDER VEER, M. D., Albany, N. Y.

Regent of the University of the State of New York.

AS a result of conferences between the States of New Jersey, Michigan, and Ohio, formal agreements for reciprocity in medical licensure have been entered into between the States of New York and New Jersey, Michigan, and Ohio, during the school year just closed.

The basis upon which reciprocity obtains between these states is a license earned *on examination* in either one of them. The candidate for endorsement of a medical license must present credentials from the officials of the state board of medical examiners which licensed him, showing that at the time of such application he is a reputable practitioner. Provision is made for the inspection of the qualifications of an applicant either personally or professionally when there are reasonable doubts of his qualifications, and an applicant presenting a license issued prior to the establishment of reciprocity may be required to submit the original papers on which the license was granted or certified copies thereof. Only an original state license can be endorsed.

The preliminary education required for admission to the medical schools must be the same in each state, and the certification of the education department of the state as to the standards maintained by secondary schools will be accepted by the education department of the other states. The standards to be required of secondary schools without those states must be fully equivalent to those required within the states, and such standards shall be determined in joint conference between the education departments of the states, the registered list of New York State remaining in force till a joint list becomes operative.

The unit of value in measuring or estimating the preliminary qualifications is the count which is of universal use in New York state and is in accord with the academic syllabus for secondary

1. From the New York Medical Journal, October 13, 1906.

schools. The recognized medical schools registered as maintaining the required standards are those of the states in which the applicant seeks endorsement. The standard of registration of the board of regents of the University of the State of New York and their list of registered medical schools in group 1 are adopted, each state reserving the right of submitting evidence with reference to any institution, either for removing it from or for placing it on the approved list.

Full faith and credit are given by the board of each state to the examinations held by the boards of the other states. The applications for license under this agreement must be endorsed in the representative states by the president and secretary of the board of examiners and by the commissioner of education. The agreement has been signed by the representatives of the state boards and the education departments, and remains in force until rescinded by formal action.

From the report of an American Consul in Austria, Hugo Donzelmann, Prague, March, 1898, the following statement of the principles of the first laws promulgated in Europe with reference to the practice of medicine and pharmacy is condensed. Their principle is still apparent in all later laws, namely, the public good, and this principle is the underlying principle in the growth of laws affecting admission to the practice of the learned professions in the United States.

The first decree of Frederick II., in 1224, can be said to have been the fundamental constitution of all existing laws in Europe, the same having been amended and improved upon from time to time, but always bearing in mind that the practice of medicine and pharmacy was to be under the special care and supervision of the government in order to protect its people against imposition. In that year he established by a decree the first college for the education of physicians, at Naples, and promulgated the first laws governing the practice of medicine within his domain, viz., that no person should be admitted to the practice of medicine who had not passed his examination before the Collegio Medico de Napoli; that after having received his diploma from said college it became necessary for the person to enter into active practice with a regular practising physician for the period of one year as assistant; and that an oath had to be taken by the person whereby he promised to follow and live up to the laws of the country respecting the practice and sale of medicine and whereby he bound himself to attend to the sick, to accept only a reasonable fee from all who were able to pay, and to treat the poor and impecunious free and without charge.

It would be interesting in this connection to trace the development of professional laws in the United States, but this is foreign

to the purpose of this article, and I have time only to refer to the series of bulletins published by the regents, entitled *Professional Education in the United States, Medicine*. The New York statute establishing these standards whereon reciprocity may be entered into with other states, reads as follows:—

“Applicants examined and licensed by other state examining boards registered by the regents as maintaining standards not lower than those provided by this article, may, without further examination, on payment of \$10 to the regents, and on submitting such evidence as they may require, receive from them the endorsement of their license or diploma, conferring all rights and privileges of a regents’ license issued after examination.”

In determining whether standards are lower than those provided by the statute, four distinct lines of statutory requirements are studied: (1) the preliminary education required for admission to the professional school; (2) the professional training required for graduation; (3) the licensing test required by an independent examining board; and (4) registry in offices of record.

The present preliminary education of New York state required for admission to registered medical schools and the medical licensing examination, is evidence of four full years of secondary education subsequent to eight years of elementary or the equivalent in higher institutions. The evidence of this preliminary education is the medical student certificate, in the determination of which certain specific requirements are exacted. By reason of the unification of the various educational forces of the state a harmonious and complete determination of the various conditions surrounding the problem of admission to higher institutions is possible. For example, the more than 650 high schools and 150 academies are chartered or admitted to membership in the university under uniform requirements. The courses of study in these secondary institutions are based on eight full years of elementary instruction brought into harmony with the secondary work through a centralized administration. The subjects and their treatment in the secondary schools are outlined and determined on expert judgment of the teaching body through its representatives and the appropriate authorities in the education department, which finds expression in the academic syllabus in force for a syllabus period of five years. The work of these secondary schools is tested and kept up to grade by a system of examinations which not only provides for this purpose, but renders possible the determination of the character of work done by students unable to take advantage of the schools.

The registration of the secondary schools based on inspection and examination tests provides for a series of credentials the most accurate and clearly determined by any administrative authority.

By reference to the full agreement in effect August, 1906, between the states of New York and Ohio, Section 5 (see page xx) it will be seen that the preliminary education required for admission shall be the same for both states, and that the certification of the education department of either state shall be accepted by the education department of the other. The effect of this agreement, as shown by experience with New Jersey, is to develop and harmonize the requirements for admission to the other professions, so that in the near future there will be reciprocal relations, not only in medical licensure, but in all other lines of affiliated relations, with a number of the strongest states of the Union.

The professional requirement for the registration of medical schools and for admission to the medical licensing examination is the study of medicine not less than four full school years or at least nine months each, including four satisfactory courses of at least six months each in four different calendar years in a medical school registered as maintaining at the time a satisfactory standard. The registration of the medical schools has reference to the professional educational requirement and, for all schools registered or accredited July 1, 1906, and subsequent thereto, to the general preliminary educational requirement also that must be met by candidates for admission to New York medical schools. Prior to that date the registration of the professional requirements of medical schools was determined independently of the general preliminary education required for admission to the same. A marked advance has come from the accuracy and careful consideration of the problems involved in registration. When registration required the meeting of the full professional law, and no crediting was possible, students in lower institutions desiring to migrate to superior found it impossible to do so, for the authorities of the lower institutions would not apply formally for registration when they feared the loss of students, but by the system of registering in two groups students can receive credit for such work in medicine as can be accorded them, and relieved from repeating the same in registered institutions.

The formal licensing examination is but one of the three essentials to a license to practise medicine in the state. The first essential is based on the principle that the student had completed his preparatory work prior to entrance on his professional, with the possibility of his being conditioned in not more than one year of the preliminary training, *which must be worked off before beginning the second course counted toward the degree.* This latter provision is a source of considerable friction in the administration of the law and is but little understood by the general

public. Its wisdom, however, is plainly apparent in the development of this work.

The second essential, a degree from a registered professional school, is a marked step in advance of the requirements in foreign countries, as it is well known that very few of the medical practitioners of Germany and Russia complete the requirements for a degree, the state's examination being regarded as even a higher qualification. Moreover, the determination of this requirement exacts careful attention to certain details. The four full years of medicine necessitates at least forty-five months of professional training; full years of medical training precludes an allowance to graduates of other cognate professional schools, such as dentistry, veterinary medicine, pharmacy, osteopathy, and the like, but the accuracy of this registration and the determination of secondary units of measure are leading to the possibility of recognition of work completed in kindred professional schools. It needs no argument to convince one that the graduate of a medical school having a four years' curriculum possesses training that can be accepted as a portion of the admission requirements to other professional schools. It is also apparent that if accurate definitions become available, work in professional schools of one character may be recognized in lieu of the same work in other schools of kindred nature. For example, general chemistry, the foundation for the special chemistry in a medical school, should receive credit for the same general preparation for admission to the special chemistry of a pharmacy school.

The third essential is the formal written licensing examination, which is based on the former essentials and is the final act in the government's special care for the public good. The question of the use of English does not enter into the revision of the applicant's paper, although he is obliged to use the English language in his answers, for his mental training was determined by the first essential requirement. No effort is made by the formal written test to determine the clinical experience of an applicant, such requirement having been met under the second essential. The final test—the licensing examination—determines the competency of the candidate applying for admission to the *general* practice of medicine in the state, in order to protect the people against imposition.

The importance of these agreements can hardly be overestimated, and to show the marked advance of this step I quote from Bulletin 8, *Professional Education in the United States*, entitled, *Medicine*, issued January, 1900:—

"A uniform standard for admission throughout the United States is impracticable at present, owing to varying conditions as

to density of population, educational advantages, and general development. Weak states cannot maintain the standards maintained elsewhere, and strong states cannot afford to lower their standards. The present need of less multiplication of standards, however, is most important. Instead of a separate standard for almost each political division, two or at most three standards should answer for all. In the first group should come the strongest states, and the standards maintained by these states would act as a stimulus to weaker political divisions."

From a careful consideration of the *synopsis* published in *Handbook 9* of the education department, it plainly appears that reciprocity can become effective in the near future between a group of states extending from the Atlantic to the Pacific.

It can be said without fear of successful contradiction that today the New York statutory requirement for admission to the practice of medicine is clearly equal to the highest required by any state or government in the civilized world. While it may be said that the requirements for state's examination in Prussia exacts higher preliminary and professional training, a recent communication from the Prussian authorities asserts that they are not obligatory on applicants for admission to the practice of medicine in Germany. While the requirements in Austria are plainly superior to those of other European countries, with the possible exception of France and Switzerland, the problem of notification has complicated the situation and the strained relations between Austria and Hungary have led to modifications that obscure the view. It is worthy of comment that the highest requirements for admission to the practice of medicine are found, not under monarchical governments, but under republican forms.

As to the future, the study and attention given to the problems involved in items reported above bid fair to receive final solution in the near future, and we look to the development in the present decade of preliminary requirements for admission to professional schools that shall equal the standards of Germany; professional training in higher institutions the full equivalent of that of Austria, Hungary, or Italy; the combination of university courses whereby the work required for degrees in arts and sciences, in medicine and like departments, shall be so coordinated as to require the least repetition and accord the highest recognition to all scientific work in these departments, which form the basis for the special work of the schools. An earnest effort is being made to so correlate the courses of instruction in elementary, secondary, and higher institutions of the state as to save from one to two years' time in the life of the student attaining a combined baccalaureate and medical degree.

In closing, let it be said that New York State has little desire to exploit its standards and less to insist on other states being satisfied with these minimum requirements.

28 EAGLE STREET.

Expert Medical Testimony.¹

By DAVID M. TOTMAN, M. D., Syracuse, N. Y.

PERMIT me to express to you my appreciation of the honor you have conferred upon me, in making me your presiding officer of this the thirty-ninth annual meeting of this association. In reviewing the names of the men who have been presidents my attention has been called to the number of honorable names in this list; men who have added to the working resources of the medical profession, men who were great teachers and exemplars of all that is best in the medical profession.

I had planned, after my election, to write a paper on "Flat-foot"—a subject on which I have worked for several years, and Dr. Weigel who was present and read a most excellent paper at the Buffalo meeting, promised to follow me with a paper, giving his researches in this very field, and in which he laid the beginnings of the fatal disease which ended his life. Truly he laid down his life for others. I wish to call your attention to a subject which we will have to meet soon—namely, the future status of the association. Are the meetings of the district branches of the state society to affect our meetings?

In accordance with time-honored custom wisely established, it becomes one of the functions of the president to present an address. With a whole year before him he should and is expected to present something of his best endeavor in some line of work which lies close to the heart of the profession. I therefore beg your indulgence for a few minutes while I present the subject of

EXPERT MEDICAL TESTIMONY.

It is necessary for me to outline briefly the history of a negligence suit tried in the supreme court in the city of Syracuse which culminated in a jury verdict for the plaintiff of \$20,000 which sum was reduced by order of the trial judge to \$15,000, and which is now in the appellate court, but has not yet been argued.

The plaintiff in the case was a young unmarried woman of Irish descent, whose father showed evidences of seriously impaired health, and it was asserted that the mother had suffered serious mental and nervous disease, while the young woman herself was plainly of a highly nervous temperament. One evening

1. Presidential address delivered at the thirty-ninth annual meeting of the Medical Association of Central New York, held at Syracuse, October 16, 1906.

she fell in a subway trench, which was two or three feet deep, being under construction for a telephone company. The accident happened late in September, 1905, about 8:30 P. M. The usual curious crowd collected. Dr. Alfred Mercer was summoned and examined carefully the patient while she was sitting nearby the place of accident. His statement to me was that some general excitement prevailed, and that the young woman was in a state of nervous perturbation. She was taken soon afterward in a carriage to her home, and another physician was summoned. It appeared later that there was a cut on or just below left knee, which never left even a scar. The description given of this wound was that it was about an inch long and one-fourth inch deep. Also, that there was a small swelling on the back of the head, which rapidly disappeared.

It appears that on that same evening at ten or eleven o'clock the physician told the patient that the knee injury was a serious one. That she would have a stiff and impaired joint, and he put on a plaster cast, and the same was worn for thirteen days. It was then taken off and again reapplied and worn for some days longer. This physician committed suicide a little time after this, and other physicians were employed, but were not called into court. It appears that within less than three weeks a suit for \$25,000, was begun, and the patient was on crutches about the house for some months. In the latter part of February, 1906, another physician was called, and on or about March 8, the woman had some convulsions, which lasted about twenty-four hours, and following this she became unconscious. The case was duly heralded in the newspapers through many months, as the wonderful sleeping girl. The house was thronged by many people prompted by curiosity in quest of the marvelous.

I first saw the patient, being called as a consultant on March 28, and made a second visit on or about April 8 following. I made a careful examination and study of the case on these two visits. Again, on April 22, I saw and critically examined the case as one of two physicians appointed or chosen by the defendant, with the direction and approval of the court. The attending physician was present at this examination. The case was gone over in the minutest detail. In my opinion my visits as a consultant gave me an opportunity of great value, to obtain information regarding the case. I was thus enabled to consider the case solely in the interest of the patient, at a time when the question of her life was in the balance, and when, unless something was done and right promptly, she would die, for I was informed that she had taken no nourishment for three weeks, and was actually suffering from starvation, which her appearance indicated.

I will now read an abstract of the official minutes of the stenographer, as taken in the trial.

Q. Give the evidences first, and then tell us what it is. (Her state).

A. The condition of the patient, the mental condition of the patient, the mental signs, that is, the seeming sleeping condition, the closed eyes, the quivering lids, the following of the lids with the eye ball when the eye was opened, the loss of sensation over one-half of the body, the rigid condition of the left leg, the slightly exaggerated condition of the reflexes in the right leg, and also in the left, the dusky appearance of the skin on the arm from wrist down, the fact that the left leg was involved alone, were all physical evidences of functional disorder.

Q. What kind of disorder?

A. Hysteria.

The Court: Just give the causes of hysteria.

The Witness: The causes of hysteria fundamentally cannot be given; certain manifestations can be given, but as to the fundamental causes which produce hysteria, it reaches further back than the incident which brings it out.

Q. Are there certain classes of persons who are more predisposed to hysteria than others?

A. There are.

Q. What are they?

A. Those of a nervous, highstrung, emotional, excitable temperament; the active factors in producing hysteria, or hysterical manifestations are, excitement, emotion, anxiety, fatigue, worry, fright, and suggestion.

Q. What do you mean by suggestion?

A. Suggestion is the introduction into the mentality—into the mind of an individual,—of certain thoughts, which are more or less fixed, either by the speech of another person or by something seen or something felt, which produces a fixed and permanent, more or less permanent sensation of pain, and more or less functional activity of certain portions of the body.

Q. Upon the question of suggestion?

A. That suggestion, that fixed idea,—the application of a splint to a knee or a joint in a hysteric individual, for example,—will produce a stiffness in that joint every time.

Now I think I have laid sufficient foundation to proceed to the essential part of this paper—namely, the consideration of the question as to what is to be done with expert medical testimony.

First, I wish to make two or three preliminary statements, to show simply what has given the trend to my thoughts. I well remember the effect of Dr. Sefton's paper read in a meeting at Rochester a few years ago, and the full and animated discussion of the subject of expert medical testimony which followed. Within a year in a conversation with one of the most learned and distinguished members of the bar in my acquaintance, he strongly

advised me never to go into a medico-legal case again. He said there was neither honor nor glory nor anything else to get out of it, but to get my name smirched and dishonored. I say to you now that the conditions which surround the giving of expert testimony in our courts have become well nigh intolerable, considering the attitude of the public press, the insulting innuendos of graft, and the charge of open perjury committed by medical men on the witness stand; hence I affirm with emphasis that these conditions are not getting better, but have become intolerable.

I had a discussion with my confrère in this case, as to whether we would go into it or not. In seeking some relief for the conditions which burden the profession with disgrace, I offer briefly the following suggestions, which have grown in my mind from a careful study of this case.

First of all, I see no relief in trying to reach a change in the method of a jury trial. Jury trials are to be had, and it will take centuries of education and evolution for a jury to ever comprehend such expert testimony as was given in this trial of which I have given you a little part, so I say, no matter how true or perfect the testimony which can be presented to a jury may be, the verdict will not be influenced one whit.

The statement which I now offer, I make with diffidence and hesitation; it is that some facts which have come to my personal knowledge, convince me that even the learned judges are not always able to appreciate the bearings of expert medical evidence such as was given in this case. I do not mention this in the way of criticism nor in a captious spirit; I am only considering the subject in the line of facts. I hold this, that hysteria is a subject of such a nature that neither jurymen nor a judge, however learned he may be, is able to execute justice when such a subject is under consideration. The learned judge can have access to all medical libraries, he may read every treatise that was ever written, yet his knowledge is as nothing. The only man who can appreciate and execute judgment in a case where this disorder of so many different forms of expression is found, is a well educated and trained medical man, with at least fifteen or twenty years of study, observation, and management of hysteria: bedside treatment first, hospital treatment, home treatment, are all essential; therefore, the man to pass upon the value of expert medical testimony must be a man who is able to understand such evidence in its entirety.

My first thought was that a way to meet this matter was through and by proper legislation,—to have one additional member of the Appellate Court, a properly qualified medical man, whose sole duty should be to pass upon medico-legal testimony. Further consideration leads me to go a step farther in my sugges-

tion, and that is to have the power given by legislation to the Appellate Courts in our state, to name a board of three members for each Appellate Division of properly qualified physicians, of at least fifteen or twenty years practice, to serve for a period of fourteen years, whose proper office and duty should be to consider all medico-legal cases, under the jurisdiction of the Appellate Court as advisors to the Court. The judges of each Appellate Court should be authorized to choose the men in their own district, as their acquaintance with the physicians will aid them in the selection of the men best fitted for this work.

What will be the results? If there can be a proper review of medico-legal evidence by men competent to sift and analyse the same, no one can tell the ultimate results. Please bear in mind that I have not made mention in a single word of the evidence of the medical experts for the plaintiff. However, in my opinion, a whole volume could be written on it. And I wish it might be published to the medical profession. It would be the most powerful argument which could possibly be advanced in the support of the sum and substance of this paper—namely, that in some way there shall be established a proper review of medico-legal evidence, which I am free to say, does not obtain at the present time.

First, it will be a death blow to ambulance chasers, who have worm-eaten the legal profession quite as badly as any influences have affected the medical profession. Justice will be given in the cases, which is the main function of the case; shrewd lawyers have profited for years from the fact that medico-legal evidence has been measured by bulk and not by quality. The medical profession has a closer and more intimate association with the people than any other profession. I conceive that in the future the medical profession is to have a broader and more useful field, even that it will enter upon the field by shaping and carrying home such legislation, as shall be more clearly under the care and jurisdiction of the most enlightened and progressive profession in the world.

In conclusion I wish to say that I know that this paper has presented the subject matter in but a crude way. One of the greatest teachers I ever had, Professor Eugene Lamb Richards, now emeritus Professor of Mathematics in Yale University, was accustomed at the end of the regular recitation, to throw on the blackboard original propositions in geometry or analytical geometry, and then call for volunteers to solve them, and to him who solved a problem was given a perfect mark. The method of solution was never criticised. You could begin at the back and go forward, or up or down; you could use a pick or shovel; if you got the solution correct, you had the reward,—a perfect mark.

If I have simply stimulated someone else to carry on this work,—if I have blazed even a rude trail,—I shall not have thought and written in vain.

303 MONTGOMERY STREET.

The Medical Profession and the Simplified Spelling.¹

By BURT G. WILDER, M. D., Ithaca, N. Y.,

Professor of Neurology and Vertebrate Zoology in Cornell University.

"What attaches us to our conventional spelling is not a body of convictions, but simply habit and feeling." * * "Usage is another name for fashion, and fashions do not grow out of the ground or fall from Heaven, but are created by some one's initiative." CALVIN THOMAS.

"Language is an organism; the organism that dislikes change is very ill, the one that fights change is moribund, and the one that does not change is dead." GEORGE M. GOULD.

LIKE him who is challenged to a duel, he who is invited to address a society is accorded the privilege of choosing his subject. Yet, notwithstanding my keen personal interest in it (as akin to the Simplification of Anatomic Nomenclature that has occupied me largely for more than the fourth of a century)², I should refrain from exercising my prerogative in this particular direction but for my conviction that it is the duty of the members of our profession to recognize the existing defects of English spelling, to appreciate the past and present efforts to improve it, and to coöperate with the simplifiers in their individual, professional and associational capacities.

The defects of current English spelling fall under two heads, viz., (1) Superfluity of letters or of syllables,³ involving waste of time, energy, space and money. The following examples, excepting the last, are selected from the "List of 300 Words" recommended in place of their longer forms by the Simplified Spelling Board and reprinted on a convenient card by the Govern-

1. Read, by invitation, before the thirty-ninth annual meeting of the Medical Association of Central New York, held at Syracuse, N. Y., October 16, 1906.

2. See, e. g., "A partial revision of the nomenclature of the brain, Amer. Asso. Adv. Sci., 1880, *Medical Record*, vol. 18, p. 328. "Paronymy versus heteronymy as neuronymic principles," Address, as president, before the Amer. Neurol. Asso., 1885, *Transactions Jour. Nerv. and Mental Disease*, vol. 12; Neural terms, international and national," *Jour. Comp. Neurology*, vol. 6, 1896;" "Terminology, Anatomical" (with S. H. Gage), Reference Handbook of the Med. Sciences, 1st ed., vol. 8; "Sonic misapprehensions as to the simplified nomenclature of anatomy," Address, as president, before the Asso. Amer. Anatomists, 1898, *Science*, April 21st, 1899.

3. For this phrase a single word would be convenient. As suggested by a colleague, the Greek would supply perisso-grammatism, but that is lengthy and unfamiliar; why not, after the analogy of *verbiage* and *verbosity*, (superfluity of words), *literage* or *literosity*? The former is more acceptable in some respects, but the latter would warrant the adjective, *literose*, analogous with *verbose*.

ment Public Printer. The omitted superfluous letters are in italics. *Catalogue*, *drachm*, *aether*, *honour*, *programme*, *synonyme*, *physiological*. Certain cases will be considered later.

(2) Inconsistencies as to spelling and pronunciation that retard the educational progress of children and aliens and—upon the principle, *falsus in uno, falsus in omnibus*—tend to bring into contempt the language itself and the nations that use it. For example, *puff* is pronounced *puf*; but *rough* is pronounced *ruf*, yet *plough* is *plow*, *cough* is *korf*, *through* is *throo*, and *dough* is *do*; to cap the climax, *do* is pronounced *doo*, and *does* is either *duz* or *doz*. No wonder the alien is mystified and disgusted, and the child temporarily stultified; “there is engendered a disbelief in learning and a total lack of confidence in inference.” Were it possible, indeed, for a rational adult to begin the study of his mother tongue he would speedily recognize the grim foundation for Lord Roseberry’s recent half-humorous remark that he was “not at all sure that the archaic rules of spelling laid down by tradition and stereotyped by the dictionaries had not filled half the lunatic asylums of the country.”

Referring to the Simplified Spelling Board’s Circulars, 1-7, to the periodical, *Spelling*, and to various other publications for the fuller discussion of most points, upon the present occasion I confine myself to four groups of cases with which members of the medical profession are more nearly concerned and in respect to which their precept and example are likely to have most weight.

A. The conversion of Latin words ending in *-ra* and *-rum* into distinctively English paronyms in *-er* rather than in *-re*, which last is characteristically French; e. g., *fiber*, *liter*, and *meter*, like *theater* rather than *theatre*.⁴

B. The conversion of Latin (originally Greek) words ending in *-mma* into distinctively English paronyms by dropping the *ultima*; e. g., *gram*, *diagram*, *program*. The French “tail” is needless and incongruous.

C. In all Anglo-paronyms of Latin words containing *ae* or *oe*, the replacement of the diphthong by the single letter *e*; e. g., *anemia* for *anaemia*, *esophagus* for *oesophagus*.

In this connection it may properly be remarked that some who write *foetus* seem not to be aware that *fetus* also was used by the Romans; also, the would-be precisians who hold out for the diphthongs should make sure which is the right one in a given case; an extensive English work upon Zoology has *coecum*

4. For the definitions of *paronym*, *heteronym*, etc., see the papers named in Note 2 and “Some linguistic principles and questions involved in the simplification of the nomenclature of the brain,” *Amer. Philolog. Asso. Proceedings*, vol. 36, pp. 14-19, 1905; copies of this paper will be sent upon application to the writer.

for caecum (better cecum) throughout, even in the index. Such pretentious pseudo-scholarship misleads others and excites derision in the better informed.⁵

D. With most Anglo-paronyms of Latin adjectives ending in *-icus*, the omission of the *-al*; e. g. anatomic and neurological rather than anatomical and neurological.

Let me at once forestall adverse criticism by three concessions. (a) In a few cases, e. g., chemical, medical and surgical, the retention of the *ultima* does not render the entire word inconveniently long. (b) Altho correct in form *medic* now has a slangy sound and its admission to scholarly association may be delayed on that ground. (c) In official documents relating to associations whose original or corporate names contained the *-al*, it may be necessary to retain it, trusting (as suggested by me in a paper before the "American Philological Association" last winter) that the leading linguistic societies, here and abroad, may take the initiative in titular curtailment.

Meantime we are bound to regard the following conditions:—
(1) With English adjectives the termination *-al* alone presupposes the Latin antecedent *-alis*, of which there are numerous examples. (2) The termination *-ic* alone presupposes the Latin antecedent *-icus* (Greek *-ikos*), and of this there are numerous examples. But the English termination *-ical* presupposes the Latin antecedent *-icalis*, and in classic Latin this does not occur so far as I am aware.

By whom and upon what grounds there were evolved the swarm of adjectives in *-ical* I know not. During the last half-century their number has materially diminished; we now say public, not publical, and we no longer follow Thackeray with heroical, St. John with epidemical, or Scott with aristocratical and enthusiastical. In the name of economy and sound etymology let us dispense with them all as rapidly as possible.

I regret that the Simplified Spelling Board did not deal sharply with this case. On the contrary, their ecumenical, while commendable in the replacement of the original diphthong by *e* constitutes an *apparent* sanction of all the *-ical* adjectives and practically counteracts the saving at the head of words like economical; doubtless, in time, this group of words will be duly considered.

Notwithstanding my dissent in the foregoing and a few other cases I bespeak for the recommendations of the Board the earnest consideration of the medical profession. The objections thus

5. The same error occurs in the text and index of the last edition of the leading German work upon Comparative Anatomy, altho absent from the English translations of two earlier editions.

far published seem to me either exaggerated or based upon an inadequate comprehension of what is proposed. Only one of them can be mentioned here. The Etymologic or Historic Objection, as has been well said, is often urged by those who are not themselves etymologists, and who could not, off-hand, give the origin and transformations of any given ten consecutive words. With the -ical adjectives it has been seen already that the etymologic evidence fails to justify the -al. But even were it otherwise, I hold that etymology and verbal history belong to special treatises and more comprehensive dictionaries, and that words, the tools of thought, should not be encumbered by etymologic superfluities; how many givers of alms are aware that the word is the scanty remnant of a Greek word, *eleemosyna*? The case is comparable to some in anatomy. Some still delight in *pons Varolii* and *insula Reilii*, altho there is no other *pons* and no other *insula*; had certain more familiar viscera been discovered or described by plain Englishmen, would that make it worth while to talk of the "stomach of Brown," the "intestine of Jones," or the "liver of Robinson?"

In general I feel assured that simplification of English spelling will avert waste in the present and for ourselves, and in still greater degree facilitate the educational progress of aliens and of coming generations.

In this busy age none has less time to waste than the medical practitioner. With no other class is altruism more nearly the dominating guide of life.

This remark, and previous ones as to the relations of the medical profession to Simplified Spelling apply equally to all English-speaking members. But it seems to me that the physicians of this country should be peculiarly mindful of the situation and of their opportunities and obligations. As American doctors they should be acquainted with and proud of the pioneer work in this direction by Dr. George M. Gould, editor of *American Medicine* and of standard medical dictionaries; since 1893 he has repeatedly and most forcibly expressed his convictions; his volume, "Suggestions to Medical Writers," 1900, is said to be now unobtainable; in my judgment no better use could be made of the sum required for its reproduction from the funds so wisely and generously provided by Mr. Andrew Carnegie. Secondly, as American scholars we should congratulate ourselves upon the existence of the Simplified Spelling Board, obtain its circulars (*gratis*) and study its recommendations. Thirdly, as American citizens, we should regard the executive order to the public printer to employ a certain set of 300 words. This action of the President of the United States lifts

the whole matter from the serene depths of academic contemplation to the turbulent surface waters of general and vigorous discussion; to quote the words of President Roosevelt's sole living predecessor, now "it is not a theory that confronts us but a condition." To me, the president's order seems worthy to rank with his advocacy of the "strenuous life," with his declaration in favor of the "square deal," and with his achievement of peace between Russia and Japan.⁶

6. This estimate is increased rather than diminished by President Roosevelt's recognition of the right of the legislative branch to orthographic control of government documents. Trusting that a future Congress may take some steps toward the Simplified Spelling, let us hope that the present one may display an equally angelic "fear to tread" new paths in the event of a difference between this and some other power.

Dec. 15, 1906.

Extensive Gangrene Following Contact with a Live Wire.¹

By NATHAN JACOBSON, M. D., Syracuse, N. Y.

Professor of Surgery, College of Medicine, Syracuse University.
Surgeon to St. Joseph's Hospital.

ABOUT six o'clock on the evening of June 15, 1906, F. H. a boy of 12 years of age was brought into St. Joseph's hospital at Syracuse. He was in a state of profound shock. He had a running pulse and complained of extreme pain in his left upper as well as in both lower extremities.

Shortly before that hour he had been on the roof of an abandoned pumphouse in a salt yard hunting for birds' nests. He slipped and began to slide down from the roof. To save himself from falling to the ground a distance of more than twenty feet, he grasped a large electric wire which happened to be one of those furnishing the current to the "White City," a summer resort in the neighborhood of Syracuse. At the time of day when the boy received his injury these wires carry sixty-six hundred volts and have an amperage of 90. The two wires which furnish this service are placed about three feet apart. It is assumed that as he seized one wire with his left hand, his left foot came in contact with the other wire while his right foot still rested on the roof of the pumphouse. He fell to the ground and was picked up in a collapsed condition. I saw him soon after his admission into the hospital.

The left hand was drawn into a state of extreme flexion and rotation and it as well as the lower part of the forearm were quite colorless. On the ulnar side of the elbow there was evidence of a burn and in the axilla of the same side there were two marks, one upon the arm and the other on the chest just as

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York, at Syracuse, October 16, 1906.

though a wire had come in contact with the body at this point. The left lower extremity was likewise in a contracted condition the foot being drawn downwards. It presented the same bloodless condition as did the left upper extremity. The skin of the palm of the left hand was charred.

The patient was anesthetised but even under deep anesthesia it was impossible to straighten out or indeed make any impression on the contracted muscles. Further examination showed that the soles of both feet were burned. Three days later the circulation in the left forearm and hand as well as that of the corresponding leg and foot still failed to be reestablished. A mummified condition of these extremities was apparent and it was evident that



FIG. 1 Showing left upper extremity.

dry gangrene was developing. After another week sepsis began to manifest itself and instead of dry there was beginning moist gangrene of these parts.

On the 30th of June secondary hemorrhage of the forearm occurred and the house surgeon ligated the brachial artery. I present to you photographs showing the degree of gangrene which had developed by July 1 as well as a water-colored picture portraying the exact condition of the left foot and leg at this date. It will be readily seen that it was necessary to amputate the leg above the middle third while the arm had to be removed at a point close to the shoulder in order to find sufficient flap covering.

These operations were performed July 3, 1906, Dr. Coon amputating the leg while I amputated the arm. I submit to you also the chart which indicates the course of his temperature, pulse and respiration.

He was exceedingly nervous after his operation and the dressings, somewhat painful of course, were made with difficulty. For a time there was considerable contraction of the stump of the leg, but this was overcome by the application of proper splints and free motion was ultimately restored to the joint. Some sinuses persisted in both stumps for a little while, due to the presence of small fragments of necrotic bone which were cast off or removed; after which these entirely healed. His recovery



FIG. 2. Showing anterior destruction of tissue of left leg.

though slow is complete. The boy was dismissed from the hospital Oct. 10, 1906.

I present this brief history as well as the patient because I know of no recorded instance of such extensive gangrene following contact with a live electric wire. In a paper presented by Dr. Carlos F. MacDonald to the New York State Medical Society at its annual meeting in 1892 the history of the first seven judicial electrocutions in this state are given in detail. I quote from his paper as to the voltage and amperage of the fatal electric current used in these executions.

"The electromotive pressure as shown by the readings of the voltmeter taken by Prof. L. A. Landy of Columbia College varied from 1458 to 1716 volts while the ammeter showed a variation in current of from two to seven amperes."

Our patient received a charge of electricity enormously greater than that found necessary to destroy life in these judicial executions. Why the boy was not killed outright I cannot say, receiving as he did more than four times as many volts and from fifteen to forty-five times as many amperes of electricity as are used where death by electricity is premeditated. Probably there was but imperfect contact. Another interesting question is why the force of the current was expended on the extremities of one



FIG. 3. Showing lateral destruction of tissue of left leg.

side of the body. Is it possible that the current did not travel through the entire body; that is to say, through the central nervous system?

There are many recorded deaths resulting from contact with wires carrying only the current used for house lighting. This varies in the different cities from 100 to 110 volts with the alternating current, while the amperage is rather uncertain being usually figured as equivalent to one-half ampere per lamp.

The probability is that where death has resulted under these conditions the wires had become crossed, the dosage of electricity received having been therefore much greater than that which usually passes through the wires. It is a matter of common ob-

servation to note that where the hand or fingers, for example, have been burned from contact with a live wire that there is a co-incident burn upon the sole of the foot; in other words at the points of contact which render the circuit complete.

Our case is not to be regarded as an electric burn. In some way the arterial blood supply was immediately cut off, either because of the contraction of the arteries through vaso-motor stimulation or the blood in the vessels at once coagulated. But, however induced, it is certain that the circulation in both extremities on the left side was suddenly and permanently arrested.



FIG. 4. Showing gangrenous condition of left leg and foot.

After a very thorough search through our literature, I am unable to find a case similar to the one here presented, where a patient surviving such a powerful charge of electricity suffered from gangrene so extensive as to require a double amputation.

430 SOUTH SALINA STREET.

Epilation is of great importance in all follicular inflammations of the skin, since it not only removes a host of microbes but also affords access for antiseptics to the deeper parts of the follicle.
—*Int. Jour. Surgery.*

Why Not? A Plea.

By JAMES A. GARDNER, M. D., Buffalo, N. Y.

Attending Surgeon to the Genito-Urinary Department, Emergency Hospital.

THE most powerful aid to the progress of preventive medicine is the education of the public to an appreciation of the need and value of prophylaxis. The more extensive the medical knowledge of the laity, the greater are the benefits they receive from the medical profession. This has been markedly demonstrated in recent years in the care and prophylaxis of tuberculosis. Such being a fact, why is it that a department of medicine as important to the human race as that of venereal diseases is looked upon by the public with indifference, if not actual opposition to any enlightenment? The general public knows little or nothing respecting the dangers of these diseases.

The experience of all medical men shows that ignorance is responsible for a large proportion of infections in the young, and that enlightenment, which engenders a wholesome fear of these diseases, would preserve thousands from their contraction. Education in this direction would not only serve as a preservative against exposure to infection, but would constitute the most valuable safeguard against the introduction of such diseases among the married. The large majority of men who carry disease and death into their families from uncured venereal diseases do so through ignorance. A general diffusion of knowledge regarding the nature and danger of such diseases, the duration of their contagious activity and the terrible consequences to wives and children would be largely instrumental in preventing these social crimes.

Think of the many lives wrecked by venereal diseases! The tabetics in our streets, the paretics in our asylums, the dead or disfigured children; think of the laparotomies for pus tubes that occur daily in our hospitals; the impotence, the sterility, the sexual neurosis that fill our offices with vagrants wandering from physician to quack and back again in the vain hope of cure, and then question the necessity of the education of the public as to the care and prophylaxis of venereal diseases! Does it not seem absurd?

Since the medical profession is the repository of this knowledge, it is evident that physicians must be its chief purveyors to the public. In dealing with a class of cases which are contagious during a prolonged period, the prompt suppression of the sources of contagion by treatment is the most effective measure to prevent the spread of infection. The cure of the individual and the prevention of disease should go hand in hand. The physician must not only realize the serious responsibility of the case,

but must be prepared by a theoretical and practical knowledge of these diseases to apply up to date methods and appliances of diagnosis and treatment.

How often do we find the gonorrheic patient received by the physician with a smile of levity, and his "little misfortune" made the subject of a joke. No wonder the popular mind considers that the treatment of venereal diseases requires no special medical knowledge or skill and that those infected do not hesitate to entrust their cases to the drug clerk, the advertising quack, or the merest novice in medicine; or that they even avail themselves of the prescription of an obliging friend, all with the deplorable result that the vast majority are improperly and insufficiently treated and not definitely cured, but go on scattering broadcast the seeds of dangerous infection which by proper treatment might have been sterilized.

I dare say there is no class of disease in any department of medicine, which in the past has been so neglected, mismanaged or which has received such a routine or unscientific treatment as the venereal class. Many physicians are derelict in the performance of their duty by declining to treat the patient; they do him an injury which is so far reaching as to affect the general public. The average patient knows so little of venereal diseases that the fact that the physician in whom he has confidence will not treat him, makes him apprehend that he has an ailment which is beneath a dignified consideration by the medical adviser. This inference readily leads to the conviction that he has a "shameful" disease. The patient is entitled to treatment, as much at least as the individual who acquires a disease in consequence of drunkenness or other infraction of morals or ethics.

Gonorrhea is still looked upon by many physicians as a trivial affection and their entire equipment consists of a glass syringe and half a dozen formulæ for injections. We chide the public for that ridiculous prudery which looks upon education in sexual hygiene as improper, as demoralizing even for the young, and for that traditional prejudice, which surrounds sexual disease with an atmosphere of shame. From the standpoint of science there can be no greater satire upon creative wisdom than the idea that the knowledge of the organs that transmit life is shameful, or that the education which would lead young men to live according to the physiologic laws of a healthy nature is profane.

We censure the public for its insensibility to the significance of the venereal peril, its indifference, its hostility, even to measures of prevention. Does not the public take its cue from the attitude of the sanitary officers who are charged with the health of the people and yet entirely ignore the existence of these diseases in the registration of those included as contagious? Are not these diseases excluded from our hospitals when they are

acute and curable, and most dangerous as a source of contagion to others? If they are admitted they must be disguised under some evasive term, so that reliable statistics are impossible to compile. And yet it is generally admitted by recent writers that gonorrhea is the most widespread and universal of all diseases. Different writers claim that from seventy-five to ninety percent of the male population of our cities have had gonorrhea some time during their lives. Noeggerath has stated that of every one thousand men married in New York, eight hundred have had gonorrhea from whom the great majority of their wives have also been infected.

Morrow states that his own observations at the New York Hospital extending over a period of several years, would indicate that fully seventy percent of all women who had come there for treatment were respectable married women who had been infected by their husbands. Lydston may be most appropriately quoted on this subject. He says:

Why the profession should join the ignorant in tabooing sexual knowledge is a mystery, quite as much so as a great deal of other cant and hypocrisy that has pervaded the medical profession from time immemorial. So-called ethics has done more to foster quackery than to prevent it. And the public smiles derisively at a profession which after years of travail, will tolerate "practice limited to diseases of women" on professional cards; yet would roll up its eyes like a dying rabbit should it perchance run across a card inscribed: "Diseases of men only." Precisely what phase of sentiment elevates a woman with leucorrhea to a higher plane than that which a man with spermatorrhea occupies is one of the things which, as Dundreary says, "no fellow can find out." Irrespective of cause, it is a deplorable fact that the regular profession is woefully ignorant and culpably negligent regarding the sexual ailments of its clientele. If the public is to be educated the responsibility lies with the profession. The sexual organs are the noblest attributes of man, and their diseases are quite as worthy of intelligent study and considerate treatment as the affections of other organs. False modesty and mawkish sentiments have no place in medicine.

Since prostitution is the fountainhead of this disease, it might seem that the only effective remedy would be to attack the evil at its source. All experience proves, however, that prostitution must be looked upon as a necessary evil in our social system which cannot be uprooted or destroyed, and it must be remembered that it is not the prostitute, but the husband and father, who carries the poison home and distributes it to his family.

The true remedy, the only remedy at the present available to modify or minimize the appalling evils, moral and physical, which flow from venereal diseases, is the education of the public, the

general dissemination of knowledge respecting the dangers and modes of contagion of venereal diseases. It is not by legislative enactments, but by the persuasive force of enlightenment, by combating the dense ignorance which prevails among the laity, and especially among the young upon whom the incidence of these diseases most heavily falls that these evils can be corrected.

If a young man is instructed in the knowledge of the facts that venereal disease is the almost invariable penalty of licentious living, that such indulgence is not wholesome for him, that it carries with it consequences to himself and others, consequences which may impair his health, vitiate his manhood and lead to a forfeiture of all those hopes and aspirations which are to be fulfilled in a safe, fruitful and happy marriage,—he will pause and consider.

What the laity needs then is such enlightenment. It is through the medical profession that this saving and salutary influence of knowledge must come. The family physician is peculiarly adapted, by his intimate relation with his patients, the freedom which his vocation allows him to talk on topics ordinarily forbidden, and his relation as friend as well as professional adviser, to impart this information and explain matters relating to sexual hygiene in a manner always decent but sufficiently plain.

403 FRANKLIN STREET.

EARACHE.—Albert Bardes emphasizes the fact that the importance of this symptom is still not recognised as it should be by either the laity or the profession, and he discusses the nature, etiology, and symptomatology of middle ear infections. Of the treatment he says that as soon as earache begins the patient should be kept quiet, put to bed and placed upon a fluid diet, and in other ways treated as we would treat a patient with a high fever. The bowels are to be kept open, and a single dose of morphia may be given to insure rest and comfort. Dry heat or else an ice-bag can be applied to the ear. The former is more acceptable to most patients. Every three hours the ear should be gently irrigated with a hot solution of bichloride 1 to 5,000, after which a few drops of a 12 per cent. solution of carboglycerine can be instilled. Under no consideration should a person be allowed to suffer pain longer than twenty-four hours. If the pain continues, and the drumhead is inflamed and distended, palliative measures are worse than useless, and any attempt to abort the inflammation by means other than surgical is dangerous, and valuable time is lost in so doing. A bulging drumhead should be treated in the same way as a septic formation in any other place. It should be freely incised, rather than simply punctured or allowed to break.—*Medical Record*, January 20, 1906.

The Air We Breathe.¹

BY DE WITT C. GREENE, M. D., Buffalo, N. Y.

IN taking up the subject of the air we breathe, there are several points to consider, most prominent of which are what is pure air, and what renders air impure? Among the causes of impurity we have vitiation by passing through the lungs, by combustion, by effluvia, and vitiation by organic matter, and the like. We will also note some of the effects and remedial measures.

All animal life requires air, that it may thrive and flourish, consequently we are very much at the mercy of our surrounding atmosphere; be it good or bad, we must indulge. It is different with food or drink. If we prefer this or that food or drink it is at our discretion to choose. Not so with the air about us; we must breathe what is furnished at the particular moment.

Air that passes over water in motion and over mountainous localities having foliage is usually the most pure, containing as it does oxygen about 20%, nitrogen 79%, carbonic acid, (ozone, which is not found in cities,) watery vapor variable, salts and organic matter traces. As I just remarked, ozone is not found to any extent in cities, this being the element that gives the air of the country its freshness. Twenty times in a minute each person consumes about one cubic foot of air. Consequently, if people are in a building, ventilation is required according to the dimensions of the room, and number of people present or they will be detrimentally affected. I believe that more people die from the impurities they breathe than from all other sources combined. When we consider diphtheria, scarlet fever, pulmonary tuberculosis, and similar diseases, how rapidly the mortality runs up. Most of our cities and villages have taken steps to provide ventilation among other requisites for the wholesome home, and today buildings are erected only after the plans have been approved by certain town or city officials, having in mind safety of construction, proper fire protection, and ventilation.

Special attention, too, is being given to the tenement house. Our tenement houses are largely occupied by Italians and Poles, especially in this city, and they are disposed to group themselves in small rooms to reduce the rent, and also because that was their custom in their native land. In Italy, especially about Naples, there may be seen the tenement locality so crowded that one would think the inhabitants from other parts of the city had all congregated in one particular place. There the climate is so mild that ventilation is much better, the windows being open the greater part of the year.

Air in passing through the lungs gives up about 4% of oxygen and about the same amount of carbonic acid is exhaled.

1. Read before the Buffalo Medical Union, October 17, 1906.

besides watery vapor and organic matter; the skin also adding its contribution to the pollution. In twenty-four hours it is estimated that from the respirations alone there are thrown off about one quart of watery vapor, and organic matter. How often when called at night to see a person suddenly taken ill, we find the room of the patient so polluted by vitiated air that we are obliged to throw open a window to get a satisfactory amount of oxygen.

The air of rooms is also often vitiated by the combustion of illuminating gas, and gas used in stoves without chimney connection, so much used in many cities and villages. Gas is perhaps used more in cities and villages for lighting than any other article. It is estimated that the vitiation of air from the effects of one gas jet equals the amount of vitiation caused by three or four persons.

We also have sometimes present in the atmosphere of rooms carbon monoxide formed by the partial combustion of carbon, commonly called coal gas. This is so very poisonous, that 1% is said to have proved fatal. It is remarkable what poor judgment is often exhibited by those in charge of ventilating public places, such as churches, theaters, cars, schools; houses, and other buildings. Often no discretion whatever is used, but either all windows or ventilators are opened or all of them are closed, those in charge not realizing at all that a constant change according to conditions is desirable. Recently, when in one of our public schools I was seated near a radiator. As the room was quite warm I endeavored to turn off the heat. I asked the teacher in charge of the room if I was turning it the right way, and her reply was, that she did not know as she never touched it. Pointing to the registers in the wall, I enquired if the fresh air came in above or below, and to this question she looked blank; and all this after teaching about thirty pupils in this room for at least two years to my knowledge.

The aim of ventilation is to remove the products of combustion and substitute therefor fresh air without draughts. One person requires about 2500 cubic feet of air per hour. A room that is 15 x 16 and 10 feet high contains 2400 cubic feet of air. When one person is in this room, the air to be kept as pure as before he entered it, should be changed every hour. School rooms are seldom provided with adequate means of ventilation and this lack often accounts for dulness and sleepiness of pupils, by reason of taking into their systems vitiated and poisonous air. As a rule the teachers are affected more than the pupils, as the latter, especially if young, run about and throw off the accumulated poisons, while the teacher drags herself to the nearest street

car, to be carried home and lies down exhausted from the efforts of the days' work and the vitiated air still in her system.

Sometime ago Dr. Carpenter and Professor Hill of this city made many examinations of the atmosphere of school rooms in this as well as other cities, with the idea of improving the system of ventilation of the schools of Buffalo. In making their observations in the schools they noted the conditions of every room occupied, and then noted the highest and lowest amount of carbonic acid per 10,000 cubic feet of air in each room. Over eight parts of carbonic acid in 10,000 is very undesirable. These are among the observations they made, giving style of ventilation, with lowest and highest percentage of carbonic acid in each room in 10,000 parts.

CARBONIC ACID.

		In 10,000 Parts. Lowest. Highest.	
1st School.....	Fan Vent.....	per vol....	4.62.... 7.82
2d ".....	".....	".....	4.05.... 7.7
3d ".....	Window.....	".....	9.120.9
4th ".....	".....	".....	5.5 9.
5th ".....	Fans.....	".....	4.916.
6th ".....	".....	".....	6.410.4
7th ".....	".....	".....	4.514.6
8th ".....	Windows.....	".....	38.52.4
10th ".....	Vacuum.....	".....	8.12.6
11th ".....	Windows.....	".....	13.25.6

As only the schools out of town which were supposed to have the best ventilation were examined it would hardly be fair to compare them with the Buffalo schools. I believe they found the Roger Walcott school in Boston, Mass., to average 4.5, it being the best ventilated school of any visited. No wonder with a report of this kind that scholars, boys, as well as girls, often find much difficulty in completing the school year, with the large amount of work exacted of them. Close confinement for long hours in crowded and poorly ventilated school rooms, may produce nervous susceptibility, chlorosis, spread of infectious diseases, and other troubles which could be largely avoided, if fewer scholars occupied a given space and the ventilating apparatus were not overtaxed.

Sadly enough a member of this society lost a son from the effects of pulmonary tuberculosis contracted from a scholar at school who sat in front of him. Carbonic acid, being warmer than the surrounding air, when exhaled rises immediately, and if not allowed to escape cools and settles down only to be breathed again, if not drawn or forced out by mechanical device. Nor is carbonic acid the worst feature of vitiated air, but the putrifying organic matter given off in the breath and by the skin is even more poisonous. We are apt to measure the impurities, however by the amount of carbonic acid which the air contains.

There are three mechanical methods of ventilating rooms—namely, vacuum, air forced in at ceiling and withdrawn at floor, and the reverse. In France, the inlet is usually near the floor and outlet near the ceiling. In this country we are inclined to take the opposite method of forcing in the air near the ceiling and drawing it off at the floor. Then we have the vacuum plan of drawing off air from the floor, the fresh air rushing in to take its place. This method is becoming quite popular, and is frequently used in ventilating modern steamships.

Another cause of vitiation of the air we breathe is effluvia. Our cities have established a complete network of leaky sewers. Sewer air is made up of ordinary atmospheric air, gases from fermentation and petrification, and a variable amount of organic matter in suspension. The dangers are not so much from gases as from the microorganisms held in suspension. We also have to breathe the contaminated air containing dust. In cities especially the air contains many impurities from decaying material of all kinds and colonies of bacteria. The automobile is a new factor in causing dust; it is not only detrimental to health, but much complaint is made along country roads of its being destructive to vegetation. The leaves of trees and plants, cease to thrive when covered with dust, as they are the lungs of vegetation.

Again, in some cities, and I am sorry to say Buffalo is among the number, we have to breathe in an atmosphere of smoke, but the amount of smoke respired is not always apparent. We cannot fail, however, to always recognize it when we approach the city from any direction, but after being in town for a few days we become somewhat accustomed to it. If a cloud of it drops down on us from some downtown smokestack our attention for a moment is attracted, only to be soon forgotten, and then we go on breathing it just as before. The smoke problem is a difficult one to deal with and it is not new. About six hundred years ago when London had a population of only 50,000 the citizens petitioned King Edward I to prohibit the use of soft coal (which is the kind that today makes the smoke for our city), and he responded by making the use of soft coal an offense punishable by death. We think this a rather severe penalty, but surely the punishment should fit the crime. When we consider that in one ton of coal there are about sixteen pounds of sulphur and this escapes into the air as sulphurous acid, a portion combining with oxygen of the air and forming sulphuric acid there is ample reason for prohibiting the use of soft coal. This acid is always destructive to vegetable and living tissue. The air that is charged with smoke is very injurious, causing as it does many chest affections; besides it is detrimental to foliage

and mars the appearance of our monuments and fine buildings.

A boiler user has no right to inflict on a community an unnecessary amount of smoke and gases, simply to save money by using a particular kind of fuel, which is a menace to cleanliness, comfort and health. The man behind the shovel (if the automatic stoker be not used) can do much to relieve the smoke nuisance even when using soft coal. For example, in my neighborhood there is a manufacturing plant which has been in existence for years, during which no annoyance was experienced by neighbors on account of smoke. This plant changed hands May 1, 1906, the new firm continuing to use the same bituminous coal, boiler and engine. Soon the amount of smoke emitted became so great at times that neighbors were obliged to keep their windows closed and send out their laundry. This condition was relieved only after applying to the authorities. It requires an expert to be a good fireman, but the automatic stoker is the more reliable. Anthracite coal is dearer than bituminous, and always will be in this country, as it is found only in Pennsylvania, while bituminous is found in many states. In Pittsburg the smoky conditions have improved only after years of persistent warring on the nuisance. I was told by a carpenter, who some time ago was engaged in the construction of a hotel at Pittsburg, that it was so smoky that each carpenter was given six candles a day in order that he might have light enough to perform his work. Some claim that carbon is healthful. We do not think it improves the healthy lungs, but on the contrary irritates them, and we do know that the gases that accompany the carbon are detrimental to health, as the soot is not simple carbon but is laden with carbonic oxide, carbonated hydrogen, and sulphuretted hydrogen.

In England, firemen and engineers are liable to a fine if their engines smoke unnecessarily, which does much toward preventing the nuisance. Munich has the reputation of being the most free from smoke of any large manufacturing city in the world. Smoke consumers are used there which devour the smoke. In this city among the large plants we find foundries for the manufacture of bells, bronzes, iron, machinery, steel wares, and the like, and about fifty breweries all using much coal. The argument that the presence of smoke indicates business is refuted in the example of Munich which in 1871 had a population of 170,000 and in 1905 of over 500,000.

In Boston there is a law that no boiler will be permitted unless the owner agrees to use hard coal, or a smoke preventer. In Cleveland much trouble was experienced with smoke from railway locomotives, and accordingly a method was employed to

keep a record of five different roads running into the city. A chart was used ranging from 0, no smoke, to 100, very dense smoke, and giving the length of time of observation; and by judicious management instead of careless firing, the amount of smoke was reduced from 20% to 11%. This only goes to show what care will do.

In Buffalo, especially in the business section, it is very sooty at times and it is getting worse as time goes on, and this, regardless of the fact that our city ordinance prescribes, "That it is unlawful for any person or persons to maintain or cause to be maintained any engine sending forth a large amount of smoke, causing discomfort and being injurious to health and property." New York city would not tolerate for one moment what we do. The New York Central and Hudson River R. R. running into the city is compelled to use anthracite coal and very little if any bituminous coal is used in the city.

It requires an expenditure to keep down the amount of smoke, just the same as it costs money to provide sewage for our property, which the law prescribes, but these are expenses which the citizens have a right to ask and expect. Some will say, "we want smoke, it means industry." We say that a small amount of smoke is not inconsistent with industrial activity. After touching briefly on the contamination in various ways of the air we breathe, we are all agreed, I think, that vigilance should be the watch word.

1125 MAIN STREET.

ASPIRATION OF THE TYMPANIC CAVITY AFTER PARACENTESIS; A VALUABLE AID IN THE TREATMENT OF ACUTE OTITIS MEDIA.—Percy Fridenberg, in his discussion of this subject describes a procedure which he has followed for about six years. Immediately after the paracentesis is made he presses against the external meatus, hermetically plugging the canal, a small glass bulb about five-eighths of an inch wide, shaped like an olive with a very blunt tip. Suction is then applied and gradually increased until there is a flow of fluid from the middle ear and the glass bulb becomes more or less filled. The effects of this aspiration by energetic suction are most gratifying. Pain is relieved. Drainage is far more free, several drams of fluid being often removed. The paracentesis opening does not have so great a tendency to become closed. The removal of inflammatory exudate from the middle ear and the dilution of the contents with blood serum also work against septic clot formation. In cases of very young children and infants, especially, when there is doubt whether the drum has been properly opened or not, the application of suction will immediately settle the question.—*Medical Record*, March 3, 1906.

CLINICAL REPORTS.

Suggestions in the Treatment of Diseases of the Respiratory Tract.

By J. F. T. JENKINS, Ph. G., M.S., M.D., Los Angeles, California.

A MARKED advance in therapeutics has taken place in the last few years and many new remedies have been introduced which, after careful clinical tests, have been found to be vastly superior to former methods of treatment. A drug which has attracted considerable attention is the new morphine derivative, heroin. It has been brought before the profession for the purpose of allaying cough and to take the place of codeine as a more efficient substitute. Its action in relieving cough and dyspnea is much more prompt and decided, and the frequent deleterious after-effects of codeine and morphine,—nausea, vomiting, headache, constipation, gastric pains, tinnitus, and visual hallucinations,—have never been observed during its administration. Results are equally as good with children as with adults, and it has now taken a permanent place in the armamentarium of the physician.

Some time after the introduction of heroin, while I was Acting Assistant Surgeon in temporary command of the station for the United States Marine Hospital Service, I had a number of government patients, sailors of the merchant marine, at the Los Angeles Infirmary (Sister's Hospital) under my professional care. In one case of persistent cough, which was extremely distressing to the patient and harassing to his friends, I tried everything I had heretofore used, without obtaining even partial relief. The then resident physician, Dr. M. M. Kannon, urged me to try a new combination of heroin with other drugs, known as Glyco-Heroin (Smith), made by Martin H. Smith Company, of New York. Acting upon this suggestion, I gave a prescription for a few ounces of this preparation to be given in teaspoonful doses every four to six hours until relieved. The good effect was immediate and pronounced, and from that time to the present I have had positive results in relieving cough that I had failed to obtain in my previous experience of a quarter of a century, in the active practice of the medical profession. Before giving it in the case mentioned I was inclined to be sceptical; notwithstanding the frequency of favorable reports in regard to it by respectable medical journals and leading professional men.

I had tried without satisfactory results the usual mixtures heroin compound, of which there are so many without merit, failing entirely to accomplish all that heroin can be shown to do in using the preparation indicated. To satisfy myself still

further and to remove a doubt in my mind that this might be an exceptional case or a mere coincidence, I was induced to give it a trial in a series of selected cases of a similar character. The result was so satisfactory that I feel constrained to add my testimony to that of others and place the record of cases before the profession; first giving a brief prelude dealing with the component parts of the prescription and its applicability in the treatment of all pulmonary and laryngeal diseases, followed by the expressed opinions of some eminent medical men as to the curative action of heroin, the most important drug in this excellent combination.

Glyco-Heroin (Smith) is a true solution of heroin in glycerine; each teaspoonful represents one-sixteenth of a grain of heroin, with ammonium hypophosphite, hyoscyamus, white pine bark, balsam of tolu, with glycerine and aromatics. A glance at this formula shows a happy selection of drugs adding to the palliative effect of the heroin and each possessing decided curative properties of its own. It gives the physician an elegant pharmaceutical preparation, strictly ethical in character, a trial of which will satisfy him that it excels any single drug or combination of drugs in the materia medica. Limitation of space prevents an exhaustive consideration of the individual therapeutic virtues of the ingredients mentioned. With the exception of heroin, all are so well known that a very minute detail of their virtues is not necessary. It is important, however, to notice that the value of each seems to be increased tenfold, and the special sedative action intensified in the uniformly exact proportions adhered to by the Martin H. Smith Company in its manufacture. Referring again to the first component and most essential drug in this prescription—heroin—a recent writer says: "Though of recent date, this drug has already evinced its pronounced efficacy as a bronchial and pulmonary sedative and as an agent facilitating and promoting expectoration."

In the Boston Medical and Surgical Journal (Feb. 22, 1900), Dr. Geis pronounces heroin "an eminently satisfactory agent in loosening and expelling stagnant products from the lungs."

Dr. H. D. Fulton, in the New York Medical Journal, refers to it as a "veritable boon to the consumptive as a palliative in cough."

In the Journal of the American Medical Ass'n., Dr. W. Freudenthal states that the "irritable cough in tuberculous patients frequently yields to the administration of heroin, and this occurs in cases in which both morphine and codeine have proved inefficient." The same writer considers it useful also in asthma and pseudocroup.

Dr. W. H. Ambrose, of Cincinnati, reports as follows: "An agent like it, which diminishes the frequency of respiration and increases its force, finds a large field of application in conditions of dyspnea, as in nervous asthma and difficulty of breathing in cases of emphysema, chronic bronchitis, and especially phthisis."

Dr. E. R. Mitchell believes "it may be advantageously given in the cough and dyspnea of tuberculosis over a long period of time" while Dr. Morris Manges found it "a valuable aid in the treatment of pneumonia, alleviating the pleuritic stitches and the distressing cough....It acted well in some cases not relieved by codeine."

A number of European authorities might also be quoted, notably Prof. Leo, who speaks of it in a German medical publication as a "specific in affections of the bronchi attended with dyspnea and in emphysema."

So much for heroin, with a great deal left unsaid which might be justly stated in its favor. The ammonia hypophosphite and hyoscyamus each speaks for itself. The peculiar virtues of white pine bark in checking night sweats and in allaying all inflammatory conditions of the bronchial mucous membrane, need only to be mentioned to be appreciated. That pleasant and palatable aromatic stimulant, balsam of tolu, together with glycerine, completes the prescription known as Glyco-Heroin (Smith), now so well established by the evidence of experience.

The clinical reports of many practitioners in widely separated parts of the world attest that this combination of remedies will quiet cough, remove dyspnea, relieve pain, aid and regulate expectoration, control night sweats, and cause the wornout pulmonary invalid to add to his weight and build up his general health.

The clinical evidence as shown by these carefully-kept records has thus demonstrated that this preparation possesses qualities of unusual merit, that it contains elements within it calculated to reach the morbid state in which the symptoms originate and to correct the predisposition to further trouble.

I have used Glyco-Heroin (Smith) in the treatment of all disorders of the breathing apparatus, including coughs, phthisis, laryngitis, asthma, bronchitis, pneumonia, and whooping cough.

In addition to my personal experience, I have reports from Dr. L. T. Holland, late coroner of Los Angeles County, and from Dr. Jos. Jauch, of this city, formerly of the Univ. of Wurzburg, Germany.

Dr. Holland says he prescribes Glyco-Heroin (Smith) in preference to every other preparation of a similar nature, particularly for the relief of cough in its various forms. He speaks of its

innocuous but powerful analgesic and antispasmodic properties. He closes a brief account of the good results he has obtained by stating that it has more than fulfilled his expectations.

Dr. Jauch states that he has at last found a valuable mixture that combines the two important elements of palatability and effectiveness. He has found it agrees perfectly with the most sensitive stomach. He continues: "I have found it the most efficient agent I have yet used in subduing the hyperesthesia of the respiratory mucous membrane. I have used it successfully in the treatment of most affections of the air passages, particularly for the relief of cough, obstinate cases of bronchitis, in severe laryngeal cough, and in many distressing cases of tubercular cough of an aggravated character which has resisted all other medication."

The striking and surprisingly good results so uniformly obtained in the administration of this remedy can be fully verified by any unprejudiced trial in which it is tested. Such a trial may be made without hesitation, for notwithstanding its therapeutic advantages it possesses the virtue of absolute harmlessness. When physicians of the professional standing of Francis W. Campbell, M.A., M.D., D.C.L., L.R.C.P., London, Dean and Professor of Medicine, Univ. of Bishop's College, Montreal; and Dr. J. Leffingwell Hatch, late Professor of Laryngology in the New York Clinical School of Medicine, Pathologist to the Philadelphia Hospital and formerly Sanitary Inspector in the Marine Hospital Service, give this preparation their unqualified endorsement, their opinions founded on the actual treatment of a large number of cases, it is apparent that these positive, unlimited, and clear results must gain for this remedy a still fuller recognition, and lead ultimately to its universal acknowledgment as the best remedy of its class for the purposes indicated in these reports, and in clinical reports of prominent medical men in England and her colonies, in addition to the favorable testimony of many American physicians from Canada to Mexico and from Maine to California.

AN URGENT PLEA FOR THE USE OF LARGER DOSES OF ANTITETANIC SERUM FOR LOCKJAW, WITH A CASE IN POINT.—Rosa Engelmann believes that the ineffectiveness of antitetanic serum in cases of tetanus is due to insufficient doses. In the case, the history of which she reports, the writer administered the serum by both intraspinal and subcutaneous injections to the amount of from 60 c.c. to 80 c.c. daily to begin with, a total amount being 650 c.c., of which 520 c.c. was given subcutaneously, 85 c.c. subdurally, and 45 c.c. directly into the wound. After five days of this treatment, the man was comfortable, with flaccid muscles and less rigid jaw. Recovery took place in four weeks, and at the end of six weeks the patient was back at work.—*Medical Record*, September 22, 1906.

TOPICS OF PUBLIC INTEREST.

The Isthmian Canal.

The President's Inspection of the Canal Zone. Extracts from his Special Message to Congress reporting the Isthmian Status.

PRESIDENT ROOSEVELT spent three days in the Isthmian canal zone in the month of November, 1906, during which he worked from twelve to eighteen hours a day, familiarising himself with the conditions incident to and requisite for the digging of the canal.

The President has added another to his already many-sided qualities. He is a great inspector. He inspected the hospitals and the white and colored patients; the zone police, examining the men individually; the schools and school children, white and colored; the city of Panama, its streets and water supply; the digging with the steam shovels, including the drilling and blasting as well as the dirt trains; the buildings in the different villages, including accommodations for the employees, married and unmarried, white and colored; the commissary and quartermasters's stores; the bath houses, cook sheds for the colored laborers and the government hotels; the machine shops; and the conditions at Colon, including the great reservoir back of Mount Hope.

During these three days he talked with scores of different men,—superintendents and heads of departments, divisions and bureaus; steam shovel men, machinists, conductors, and engineers; clerks, health officers, and wives of American employees; colored laborers, and the attendants and managers of commissary stores where food is sold to the colored employees. He had interviews with the British and French consuls, received deputations of machinists and railway men and listened to complaints, suggestions and other expressions; and, finally, inspected the fire department of Colon, besides giving attention to many other minor details, riding over the different portions of the scene of operations at Culebra Cut, the Gatun, La Boca, and Sosa dams. He lunched with engineers, laborers and employees at totally unexpected times; he inspected the marines and talked with citizens. He also attended two receptions, one given by the President of the Republic of Panama, and another by the American employees.

It is probable that never before was an inspection made of so many men, so much material, and covering such an area in so short a time or under such difficult circumstances. The rainy season was on and the downpour was excessive during the entire three days. This record certainly establishes President Roose-

velt's title as the great Inspector General. And he is an inspector who inspects.

We are concerned chiefly at this time, however, with the problem of sanitation, and we let the message speak for itself on the subject, the following being the sections relating thereto:

SUCCESSFUL SANITATION.

The first great problem to be solved, upon the solution of which the success of the rest of the work depended, was the problem of sanitation. This was from the outset under the direction of Dr. W. C. Gorgas, who is to be made a full member of the commission if the law as to the composition of the commission remains unchanged. It must be remembered that his work was not mere sanitation as the term is understood in our ordinary municipal work. Throughout the zone and in the two cities of Panama and Colon, in addition to the sanitation work proper, he has had to do all the work that the Marine Hospital Service does as regards the nation, that the health department officers do in the various states and cities, and that Col. Waring did in New York when he cleaned the streets. The results have been astounding. The isthmus had been a byword for deadly unhealthfulness. Now, after two years of our occupation, the conditions as regard sickness and the death rate compare favorably with reasonably healthy localities in the United States. Especial care has been devoted to minimizing the risk due to the presence of those species of mosquitoes which have been found to propagate malarial and yellow fevers. In all the settlements, the little temporary towns or cities composed of the white and black employes, which grow up here and there in the tropic jungle as the needs of the work dictate, the utmost care is exercised to keep the conditions healthy. Everywhere are to be seen the drainage ditches which in removing the water have removed the breeding places of the mosquitoes, while the whole jungle is cut away for a considerable space around the habitations, thus destroying the places in which the mosquitoes take shelter. These drainage ditches and clearings are in evidence in every settlement, and, together with the invariable presence of mosquito screens around the piazzas and of mosquito doors to the houses, not to speak of the careful fumigation that has gone on in all infected houses, doubtless explain the extraordinary absence of mosquitoes. As a matter of fact, but a single mosquito, and this not of the dangerous species, was seen by any member of our party during my three days on the isthmus. Equal care is taken by the inspectors of the Health Department to secure cleanliness in the houses and proper hygienic conditions of every kind. I inspected between twenty and thirty water-closets, both those used by the white employes and those used by the colored laborers. In almost every case I found the conditions perfect. In but one case did I find them really bad. In this case, affecting a settlement of unmarried white employes, I found them very bad indeed, but the buildings were all inherited

from the French company and were being used temporarily while other buildings were in the course of construction, and right near the defective watercloset a new and excellent closet, with a good sewer pipe, was in process of construction and nearly finished. Nevertheless, this did not excuse the fact that the bad condition had been allowed to prevail. Temporary accommodations, even if only such as soldiers use when camped in the field, should have been provided. Orders to this effect were issued. I append the report of Dr. Gorgas on the incident. I was struck, however, by the fact that in this instance, as in almost every other where a complaint was made which proved to have any justification whatever, it appeared that steps had already been taken to remedy the evil complained of, and that the trouble was mainly due to the extreme difficulty and often impossibility, of providing in every place for the constant increase in the numbers of employes. Generally the provision is made in advance, but it is not possible that this should always be the case; when it is not there ensues a period of time during which the conditions are unsatisfactory, until a remedy can be provided; but I never found a case where the remedy was not being provided as speedily as possible.

HOSPITALS AND THEIR TREATMENT.

I inspected the large hospitals at Ancon and Colon, which are excellent examples of what tropical hospitals should be. I also inspected the receiving hospitals in various settlements. I went through a number of the wards in which the colored men are treated, a number of those in which the white men are treated—Americans and Spaniards. Both white men and black men are treated exactly alike, and their treatment is as good as that which could be obtained in our first class hospitals at home. All the patients that I saw, with one or two exceptions, were laborers or other employes on the canal works and railways, most of them being colored men of the ordinary laborer stamp. Not only are the men carefully cared for whenever they apply for care, but so far as practicable a watch is kept to see that if they need it they are sent to the hospitals, whether they desire to go or not. From no responsible source did any complaint come to me as to the management of the hospital service, although occasionally a very ignorant West India Negro when he is first brought into the hospital becomes frightened by the ordinary hospital routine.

HEALTH SHOWING REMARKABLY GOOD.

Just at present the health showing on the isthmus is remarkably good—so much better than in most sections of the United States that I do not believe that it can possibly continue at quite its present average. Thus, early in the present year a band of several hundred Spaniards were brought to the isthmus as laborers, and additions to their number have been made from time

to time; yet, since their arrival in February last, but one of those Spaniards thus brought over to work on the canal has died of disease, and he of typhoid fever. Two others were killed—one in a railroad accident, and one by a dynamite explosion. There has been for the last six months a well nigh steady decline in the death rate for the population of the zone, this being largely due to the decrease in deaths from pneumonia which has been the most fatal disease on the isthmus. In October there were ninety-nine deaths of every kind among the employes of the isthmus. There were then on the rolls 5,500 whites, seven-eighths of them being Americans. Of these whites but two died of disease, and as it happened neither man was an American. Of the 6,000 white Americans, including some 1,200 women and children, not a single death has occurred in the last three months, whereas in an average city in the United States the number of deaths for a similar number of people in that time would have been about thirty from disease. This very remarkable showing cannot, of course, permanently obtain, but it certainly goes to prove that if good care is taken the isthmus is not a particularly unhealthy place. In October, of the 19,000 Negroes on the roll, eighty-six died from disease, pneumonia being the most destructive disease and malarial fever coming second. The difficulty of exercising a thorough supervision over the colored laborers is of course greater than is the case among the whites, and they are also less competent to take care of themselves, which accounts for the fact that their death rate is so much higher than that of the whites, in spite of the fact that they have been used to similar climatic conditions. Even among the colored employes it will be seen that the death rate is not high.

DIMINUTION OF MOSQUITOES.

In Panama and Colon the death rate has also been greatly reduced, this being directly due to the vigorous work of the special brigade of employes who have been inspecting houses where the *stegomyia* mosquito is to be found, and destroying its larvæ and breeding places, and doing similar work in exterminating the malarial mosquitoes—in short, performing all kinds of hygienic labor. A little over a year ago all kinds of mosquitoes, including the two fatal species, were numerous about the Culebra cut. In this cut during last October every room of every house was carefully examined, and only two mosquitoes, neither of them of the two fatal species, were found. Unfaltering energy in inspection and in disinfecting and in the work of draining and of clearing brush are responsible for the change. I append Dr. Gorgas's report on the health conditions; also a letter from Surgeon General Rixey to Dr. Gorgas. The Surgeon General reported to me that the hygienic conditions on the isthmus were about as good as, for instance, those in the Norfolk Navy Yard.

Corozal, some four miles from La Boca, was formerly one of the most unsanitary places on the isthmus, probably the most un-

sanitary. There was a marsh with a pond in the middle. Dr. Gorgas had both the marsh and pond drained and the brush cleared off, so that now, when I went over the ground, it appeared like a smooth meadow, intersected by drainage ditches. The breeding places and sheltering spots of the dangerous mosquitoes had been completely destroyed. The result is that Corozal for the last six months (like La Boca, which formerly also had a very unsanitary record), shows one of the best sick rates in the zone, having less than 1 per cent. a week admitted to the hospital. At Corozal there is a big hotel filled with employes of the Isthmian Canal Commission, some of them with their wives and families. Yet this healthy and attractive spot was stigmatised as a "hog wallow" by one of the least scrupulous and most foolish of the professional scandal mongers who from time to time have written about the commission's work.

CORRESPONDENCE.

Professor Herbert E. Smith, Dean of the Faculty of Medicine of Yale University, States the Requirements for Admission to the Yale Medical School, beginning September, 1909. He thinks Two Years of Collegiate Work an Adequate Preparation for Professional Study.

EDITOR BUFFALO MEDICAL JOURNAL.

SIR: Believing that you are interested in every effort to improve the grade of students entering our medical schools, I am sending you a statement of the requirements for admission to the Yale Medical School which have just been announced by the corporation of Yale University as applying to the ninety-seventh annual session beginning in September, 1909.

The essential points of the requirements are that the minimum entrance qualification will be two years' work of college grade, and that the preparation must include inorganic chemistry, physics and general biology. In view of the fact that a student in Yale College may by a proper choice of subjects secure both the B.A. and M.D. in six years, the effect of these regulations will be doubtless that the great majority of those receiving the degree of M.D. at this University will receive it as a second degree. We expect this to be the case, and we hope that many will pursue more than the minimum of two years of college work. We believe, however, that the preparation involved in the college entrance requirements, and two years of collegiate work is an adequate preparation for professional study, and we do not think it desirable to make it impossible for a student to proceed to the degree with this minimum requirement in case, for any reason, he elects to do so.

The requirements as they will apply to college graduates, and to non-graduates are as follows:

I. Candidates who have received degrees in arts or science from approved universities or colleges, will be admitted on presenting their diplomas or other satisfactory testimonials.

II. Other candidates must present evidence that they have complied with the entrance requirements of some collegiate institution of good standing, or have passed equivalent examinations before some recognized examination board such as the College Entrance Examination Board. They must also present evidence that they have performed, with credit, the equivalent of at least two full years of work of collegiate grade of fifteen hours per week. Such evidence may be furnished by certificate from an institution of good standing. Candidates who have not attended institutions able to give this certificate but who have otherwise fitted themselves for the study of medicine by work of corresponding grade, may qualify by examination in this University on payment of a fee of \$10.00.

All candidates for admission must furnish evidence that they have a satisfactory preparation in physics, general inorganic chemistry, and general biology.

HERBERT E. SMITH,

Dean of the Faculty of Medicine.

YALE UNIVERSITY, MEDICAL DEPARTMENT,

NEW HAVEN, DECEMBER 1, 1906.

PRURITUS ANI.—T. Chittenden Hill says that by far the most important causes of pruritus ani are superficial ulcerations or abrasions of the anal canal. This lesion is very constant and should always be looked for. The writer then discusses various other conditions associated frequently with this affection, among which are catarrhal diseases, hemorrhoids, and polyps. Appropriate treatment must be applied to the unnatural skin before much amelioration of the itching can be expected. After defecation the patient should cleanse thoroughly the anal region, preferably with absorbent cotton which has been wrung dry of some antiseptic solution. An anal pad held in place by a T bandage will protect the parts from friction and irritation of the discharge. Nitrate of silver and citrine ointment are excellent applications in most cases. For delicate skins the following ointment may be substituted for the citrine: red oxide of mercury three drachms, Venice turpentine one ounce, lanolin three ounces.—*Medical Record*, December 22, 1906.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 284 FRANKLIN ST., BUFFALO, N. Y.

VOL. LXII.

JANUARY, 1907.

No. 6

Improved Municipal Sanitation.

SEVERAL questions formerly irrelevant to the problems of municipal sanitation are now becoming paramount. Great progress has been made in the control of communicable and preventable diseases and the annual death rate has been greatly reduced through the efficiency of the health officers in this respect, not only in Buffalo but also in many other large cities.

The time seems to be appropriate to take up collateral questions relating to the health and comfort of our citizens. Elsewhere, in this issue, we publish an important communication from Dr. Dewitt C. Greene, entitled, "The Air we Breathe," which deals intelligently with the smoke nuisance,—an ever increasing detriment to the health and comfort of this community. In New York it is unlawful to burn soft coal in factories, hotels, homes or apartment houses, and Dr. Darlington, the health commissioner, has instituted prosecutions with determined vigor against violators of the law and has obtained in each case a conviction that has served to prevent further infraction. It would be well if the health commissioner of Buffalo were given similar powers.

Another important factor causing distress and perhaps danger to the sick, which seems timely for the health department to deal with is the unnecessary noises incident to the traffic and pleasure of large cities. This problem has already been handled successfully in many cities but as yet Buffalo has not outgrown its swaddling clothes in this respect and perhaps in some others; at all events, it behaves very much like an overgrown village with reference to many problems relating to the preservation of health, and the prevention of disease, as well as those relating to the increase of its business facilities.

In New York, again, we find an example worth heeding. A crusade has been organised by a new society for the suppression of unnecessary noises, led by Mrs. Isaac L. Rice. This philanthropic, high minded and progressive woman already has successfully conducted a crusade against whistling tugs in the harbor. The hideous whistles have been put out of commission. In a recent interview Mrs. Rice outlined her plans and hopes, indicating that she has begun a long-needed crusade against the noises which make life a hideous bedlam for those confined in the hospitals and public institutions. She said in part:

I have long felt that there has been an urgent need for such a society, but as nobody else appeared willing to take the initiative in the matter I have finally had to do so myself. The noise question grows more important every year in this city, and it has become more aggravated of late than some people imagine. It is an evil which in most cases is entirely unnecessary and therefore the more objectionable. This is not an anti-noise society, but is only against unnecessary noises.

One of the things that the new society will ask the city administration's aid in, will be the detailing of a policeman on each hospital beat to prevent the various unpleasant sounds that are at present made by the small boys of the surrounding neighborhood. One of their customs is to get on their little go-carts at the top of a street on a certain hospital block, then ride down close to the fence and scrape a stick along the railing, producing an ear splitting noise which is especially annoying to the sick.

As an instance of how it would be possible to quell the various needless noises about the hospitals, Mrs. Rice mentioned the fact that St. Vincent's Hospital, in Seventh avenue, between 11th and 12th streets, which had been erected before the tracks of the street railway were laid in that avenue, had entered into an agreement with the railway authorities at that time never to ring their bells when passing the institution. This rule has been rigidly adhered to.

The milk wagon nuisance was touched on by Mrs. Rice. "Our society will endeavor to have an ordinance passed which will make it compulsory for all business vehicles, such as milk and bakers' wagons, which have to be on the streets before the hour of 6 in the morning, to be equipped with rubber tires, and to fix the milk cans in such a manner that the noise created by the shaking of the wagon will be done away with," said Mrs. Rice. "I for one will refuse to trade with a dealer who does not comply with this rule."

Factory whistles and sirens on river craft on the North and East rivers will also be made objects of crusade.

There is no possible argument that can logically prevail against the proposition that unnecessary noises prolong ill health,

increase the severity of many diseases, and should be suppressed in the interest of preventive as well as curative medicine.

In regard to spitting on the sidewalks there is but one view to take, which is, that it should be suppressed. It is filthy, disease-breeding, and ungentlemanly. In many cities a fine is imposed for each offense and in some the enforcement is so rigid that visitors are warned by their friends or acquaintances beforehand, lest they are caught unawares in the toils of the law. It is a great pity that similar ordinances are not enforced in Buffalo.

The Osteopathic Vertebra Put into Place.

JUST as these pages are being reduced to type, *The Post-Graduate*, for December, 1906, presents its appearance, and our eye falls on the following editorial paragraph relating to the demands of osteopaths for a separate state board of examiners. It is such a clear exposition of the situation that we quote it in full and commend it to those interested:

"It is claimed in some quarters and almost intimated in "Dr. Van Fleet's article,¹ that the reason for the necessity "of one board is in the determination of the osteopaths to "secure a board for themselves. When osteopathy, like "homeopathy and eclecticism, comes to be a sect in medicine "embracing all the departments of medicine and surgery, it "will be time enough to talk about giving them a separate "Board of Examiners and about the injustice of not grant- "ing it. The cases are not parallel. The Homeopathic "practitioners and the Eclectics, so long as they were recog- "nised by the State with their separate State Societies, as "an organised society of practitioners, were entitled to a "Board of Examiners, but a band of confederated charlatans, "no matter how many rich and wise people consult them, "no matter how many people report the cases cured when "the regular profession had abandoned them, so long as "they have not a chartered existence with a complete system "of instruction in all departments of Medicine and Surgery, "have no right to ask the State for a separate board, no "right to complain of injustice because they haven't it. "As has been said to them over and over again, they have "only to learn the principles of anatomy, physiology, chem- "istry, and all that constitutes a medical education just as "the other sects are compelled to do, to be allowed by the "State to practise as they will with osteopathy, or Chris- "tian Science, or Chinese vegetable and animal mixtures, but "we do not believe that the Legislature after hearing the

1. Published in the *Post-Graduate*, October, 1906.

"case out, will ever give them a separate board. Much as we desire the success of Dr. Van Fleet's plan, we can not consider that there is any argument for it in the clamor of the Osteopaths for a separate Board because each of the three Schools of Medicine has one."

JOHN G. WICKSER, of Buffalo, president of the state prison commission, made a personal inspection of the Erie county jail and penitentiary on November 14, 1906. His report to the commission was made public December 6. He criticises both institutions.

The most serious of his comments is that with reference to the Erie county jail, where, he says, facilities should be provided for giving the prisoners, confined for any considerable length of time, a certain amount of open-air exercise. Prisoners awaiting trial are presumed to be innocent until proven guilty. It is a disgrace that such prisoners are sometimes held in jail for months without being allowed any outdoor exercise.

Witnesses and sometimes children have been locked up for months—even during the hot weather—without any such privilege. Even convicts in prison are uniformly given exercise in the open air.

Mr. Wickser finds also that all the male prisoners of every degree of criminality commingle in the jail corridor during their entire terms of imprisonment. The commingling of youthful offenders with hardened and professional criminals is certainly unwise, and provision should be made for their separation. The jail is without a hospital. The Sheriff is compelled to use the witness or detention room for such purpose. That compels him to keep prisoners charged with serious crimes in the same quarters with witnesses, juveniles and civil prisoners, which is also contrary to law.

This is a state of affairs that is deplorable and for which the proper authority should be held responsible. An unsanitary jail without a hospital is an abomination.

THE AMERICAN UROLOGICAL ASSOCIATION, second section, at a meeting held at New York, October 24, 1906, adopted a memorial on the death of Dr. William K. Otis, reported by a committee consisting of Ramon Guiteras, A. Ernest Gallant, and Ferd. C. Valentine, which reads as follows:

William Kelly Otis's earthly career ended on September 22, 1906. To the members of the American Urological Association, his death is a threefold blow. Most of us knew him intimately from his childhood; by his decease we lose a consistent friend, a charming companion, a most estimable colleague.

To the science of urology his death means an irreparable loss. Cut off in the midst of his career, his inventive genius is stopped; the new and useful instruments he was continually devising must now be perfected by other hands. The advances in our work, he can no longer aid in developing. The American Urological Association loses one of its founders, one of its most active coadjutors, one of its truest adherents.

Our association shares with the family of William K. Otis, with the profession at large, and with that world in which true manhood is understood and appreciated, that deep grief which the death of so noble a character inspires.

THE BUFFALO ACADEMY OF MEDICINE at a recent meeting took up the question of the proposed new system of water supply. Dr. P. W. Van Peyma introduced a resolution to the effect that, in securing an adequate water supply, it should not be overlooked that a sufficient supply of pure drinking water should be obtained. Dr. Van Peyma, in explanation, stated that he was not committed to any particular plan, but that purity should be insisted upon in whatever method or system was adopted. He thought there should be filtration either in the vicinity of Hamburg or some nearer point. Dr. W. D. Greene, health commissioner, favored the report of George W. Fuller, the expert. Dr. Ernest Wende, the incoming health commissioner, was not prepared to make a recommendation as to what should be done to secure a supply of pure drinking water, but he was quite certain that the present system was utterly deficient. He hoped the government would prevent the dumping of sewage into fresh water streams. Dr. Van Peyma's resolution was passed by a unanimous vote.

At the last session of the Paris Academy of Medicine, Dr. Vidal (The Tribune) called attention to the great danger of contagion from the use of Oriental carpets. These carpets come from countries in which dysentery and other diseases prevail. The disease germs settle in the fibres of the material, and their transmission to the user is a probability if the textiles are not carefully disinfected. Dr. Vidal told of two cases that illustrate the danger. They occurred recently in Paris. An elderly man, a collector of rugs, received a dealer who exhibited to him a number of Oriental samples. He finally bought two Japanese tapestries, upon which the purchaser's three-year-old child played for a while. Eight days later the child died, having been infected with dysentery. A few days later the father also had an attack of the same disease that resulted in death.

THE recent police order in New York against permitting children to use the roadways or streets as playgrounds emphasizes the

desirability of increasing the number of recreation centres and public playgrounds. A number of small playgrounds, judiciously scattered over the city would be of incalculable benefit to the children, not only for their pleasure, but also for their health and morals and would also be a boon to many adults who are greatly annoyed and embarrassed in their legitimate use of the streets by the throngs of children who now make the passage of vehicles slow and difficult.

This suggestion, taken from The Tribune, applies with equal force to Buffalo.

ANNOUNCEMENT was made from Philadelphia, December 24, 1906, that Andrew Carnegie had given \$100,000 to the College of Physicians of that city to build a new library in twenty-second street, on condition that an equal amount be raised by the society. All but \$20,000 of the amount has been raised, and the best known surgeons and practising physicians in the city are working untiringly to get the remainder of the money. It is the oldest medical society in this country, having been established in 1787. It bears the same relation to Philadelphia and vicinity that the New York Academy of Medicine does to greater New York and the surrounding country.

As announced from Stockholm, the Nobel prize of 200,000 francs for medicine has been awarded to Professor Camillo Golgi, of the University of Pavia. Professor Golgi distinguished himself by his works on the changes of the lymphatic vessels of the brain and his discovery relating to malarial fever. The scientist was born at Corteno, July 7, 1844, and since 1876 has taught at the University of Pavia, where he was graduated. Another Nobel prize is to be awarded to the Spanish scientist Cazal.

PERSONAL.

LIEUTENANT-COLONEL EUGENE A. SMITH, surgeon Fourth Brigade N. Y. N. G., of Buffalo, has been appointed a member of the examining board for medical officers in the National Guard organisation. No more fitting appointment could be made. Dr. Smith is a surgeon of distinction, a veteran of the Spanish war, and a citizen of prominence. He is the author of the chapter on traumatic fevers in Keen's new surgery, the first volume of which is reviewed elsewhere in this issue.

DR. N. P. CARD of Utica, who was lately appointed assistant surgeon in the hospital of the State Soldiers' and Sailors' Home

at Bath, has presented his resignation to Commandant Ewell, after having been on duty five days. He will accept a position in the Manhattan State Hospital. Dr. Carlton Foster, late of the state hospital at Cenral Islip, has been selected from the state civil service list to succeed Dr. Card.

DR. EARL G. DANSER, Medical Examiner for Erie County (in cases of sudden death) who has been ill for some time with blood poisoning contracted at an autopsy, having recovered, has returned to his official duties and resumed his professional practice.

DR. BROOKS H. WELLS, editor of the American Journal of Obstetrics, has been elected president of the New York Obstetrical Society for the current year. The society has chosen wisely, Dr. Wells being one of its most prominent and capable members.

DR. IRVING W. POTTER, of Buffalo, announces the removal of his office and residence from 806 Fillmore Avenue to 420 Franklin street, corner Virginia. Hours: 2-3 and 6-8 P. M. Telephones: Bell, Tupper 511; Frontier, 511.

PROFESSOR DI VENEZIA, according to an announcement from Rome, probably will succeed the late Dr. Laponi as titular pontifical physician. The salary paid to Dr. Laponi was \$1,200.

ASSISTANT SURGEON C. S. ELY, United States Navy, has been assigned to duty, under recent orders of the department, at the naval recruiting station in Buffalo.

DR. JOHN D'ARCY O'BRIEN, University of Buffalo, 1904, now of Lockport, has been appointed physician to the Niagara County jail.

OBITUARY.

DR. WILLIAM C. L. MEISBURGER, of Buffalo, died December 8, 1906, aged forty-one years. He was the son of the late Dr. William Meisburger, who was a well known practising physician in Buffalo for many years.

Dr. Meisburger, the son, graduated from the medical department of the University of Buffalo in 1887, and afterward served two years as house surgeon at the Buffalo General Hospital. He was then appointed first assistant physician at the Wisconsin State Hospital for the insane at Wawautosa, where he remained for four years. He then returned to Buffalo, where he practised

until failing health a year or two ago caused his retirement. He was a member of the Medical Society of the County of Erie and of the Roswell Park Medical Club. He is survived by his wife and a brother, Dr. Louis Meisburger, who is a dentist.

DR. ALONZO GARCELON, of Lewiston, Me., one of the oldest physicians in the country, died at the home of his daughter in Medford, Mass., December 8, 1906, aged 93 years. He graduated in medicine from the medical college of Ohio, Cincinnati, in 1839. He had been a member of the American Medical Association since 1853, and was chairman of the board of trustees most of the time from 1883 to 1901, when he was elected vice-president of the association. He was governor of Maine in 1878, being the only democratic governor ever elected in that state. He was not only a prominent physician but a public spirited citizen and had a very wide circle of friends, being well known throughout the country.

DR. FERNAND HENROTIN, of Chicago, died at his home in that city of myocarditis, December 9, 1906, aged 59 years. He was the son of Dr. Joseph F. Henrotin, also of Chicago. He received his education, academic and medical, in that city, graduating from Rush Medical College in 1868. He served in various capacities from interne to attending surgeon in the Cook County Hospital and was president of the medical board of that institution. He was professor of gynecology at the Chicago Polyclinic and at the time of his death was president of that institution. He was a member of various medical bodies and a writer of considerable repute.

DR. ALFRED H. ROBBINS, of Rochester, Ind., died at his home, October 8, 1906, aged 80 years. He graduated at the University of Buffalo in 1850, had practised over fifty years at Rochester, and had represented his county in the state legislature for three terms.

DR. GUISEPPE LAPPONI, physician to Pope Pius X, died at Rome, December 7, 1906, aged about 45 years. His disease was cancer of the stomach, but the immediate cause of his death was pneumonia, which set in a few days before his death.

DR. ALEXANDER E. MACDONALD, of New York, the well known alienist and for a long time superintendent of the Manhattan State Hospital, died at his residence, of tuberculosis, December 7, 1906, aged 61 years.

SOCIETY MEETINGS.

THE GERMAN HOSPITAL, of Buffalo, held the annual meeting of its directors November 30, 1906, when the following-named officers were chosen: president, William F. Kasting; vice-presidents, C. H. W. Auel and Joseph G. Schaff; secretary, Harry J. Knepper; treasurer, Henry C. Zeller; attorney, Jacob Stern; auditing committee, Ottomar Reinecke, Jacob J. Lang, and John Messersmith.

The directors are: Joseph Block, George Bleistein, Victor B. Blehdon, Edward C. Becker, John Brunner, Fred J. Dorn, Louis Fuhrmann, S. Gainsburg, William Germann, Herman E. Hayd, William Kreiner, Alex Kercher, John Kam, Frank Kraft, Jacob Gerhard Lang, Gerhard Lang, E. G. S. Miller, Louis W. Marcus, Anthony Miller, J. G. Meidenbauer, Charles Rohde, William T. Roberts, George Reimann, William Simon, Robert F. Schelling, Phillip Scheeler, C. A. Strangmann, Henry Steul, A. Schreiber, M. Schwartzmeier, William F. Wendt, Edward A. Weppner.

THE BUFFALO ACADEMY OF MEDICINE held meetings during the month of December, 1906, as follows:

Section on Surgery.—Tuesday, December 4, at 8:30 P. M.
Program: (a) Somatic nerve manifestations of visceral disease, James A. Gibson; (b) Treatment of the stump in operations for appendicitis, Vertner Kenerson.

Section on Medicine.—Tuesday, December 11, at 8:30 P. M.
Program: (a) The acute infectious paralyzes, James W. Putnam; (b) Medical ethics within and without the profession, John D. Bonnar.

Section on Obstetrics and Gynecology.—Tuesday, December 18, at 8:30 P. M. Program: (a) Reflex dyspepsia due to abdominal and pelvic diseases, Herman E. Hayd; (b) Melena neonatorum, William G. Taylor.

THE MEDICAL SOCIETY OF THE STATE OF NEW YORK will hold its one hundred and first annual meeting at Albany, Tuesday, Wednesday and Thursday, January 29, 30 and 31, 1907, under the presidency of Dr. Joseph D. Bryant, of New York. Dr. Wisner R. Townsend, 64 Madison Avenue, New York, is the secretary. Dr. L. H. Neuman, 194 State Street, Albany, is the chairman of the committee on scientific work, who should be addressed on matters pertaining thereto.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION, at its recent annual meeting, held at Baltimore, elected the follow-

ing-named officers: president, Howard A. Kelly, Baltimore; vice-president, R. E. Fort, Nashville; secretary, William D. Haggard, Nashville; treasurer, Charles M. Rosser, Dallas, Texas. The next annual meeting will be held at New Orleans, in December, 1907.

THE MEDICAL SOCIETY OF THE COUNTY OF ERIE will hold its eighty-sixth annual meeting on Tuesday, January 8, 1907, at the Buffalo public library building at 10 o'clock A. M. The president is Dr. A. H. Briggs and the secretary is Dr. F. C. Gram. At this writing, December 24, no announcement nor program has been issued.

COLLEGE AND HOSPITAL NOTES.

THE WOMAN'S HOSPITAL of New York, established by Dr. J. Marion Sims, has moved into its new building on Cathedral Heights, just below the uncompleted cathedral of St. John the Divine. The opening of this splendid new structure, which stands seven stories high, was celebrated by appropriate exercises recently, conducted under the auspices of Bishop Henry C. Potter, who offered prayer, after which John E. Parsons, president of the board of trustees, made a brief address recounting the incidents connected with the change of location.

Dr. D. B. St. John Roosa was the next speaker; he made reference during the course of his address to the methods adopted in Pennsylvania where the state contributes to the support of hospitals. He contrasted the conditions prevailing in this country with those in vogue in England. For example, the result may be seen in London which is placarded with appeals to help support the hospitals and reminders to the public that English hospitals are maintained by popular subscription. England, he said, has a theory, shared by no other nation, that government support of hospitals is not wise. He also warned against the future possibility of diverting this hospital from its original purpose; that is, from a hospital strictly for the treatment of diseases of women into more general uses.

General Horace Porter also spoke, giving an address full of reminiscences of the battlefield and of what women had done there in caring for the wounded.

At the annual meeting of the Buffalo General Hospital Association, held at the hospital on High street, November 25, 1906, seven trustees were elected for the ensuing year. The new board of trustees met immediately and elected officers as follows: Charles W. Pardee, president; Henry M. Watson, vice-president;

H. Edson Webster, secretary; Elliott C. McDougal, treasurer.

Scatcherd Hall in the main building of the hospital was dedicated in memory of James N. Scatcherd, Thanksgiving day, November 29, 1906. The hall was presented to the hospital by the late Mr. Scatcherd's son, John N. Scatcherd. The space occupied by Scatcherd Hall was formerly the old clinic. It has been rebuilt into a modern and beautiful lecture-room which will seat about 150 persons.

President Pardee, who presided, made appropriate remarks introducing Mr. Scatcherd, who said:

For a long time I had been looking for some way to do something for this institution that would be in memory of my father. A little while ago Mr. Pardee told me that it was the intention of the trustees to convert this room into a chapel, and I at once saw that it was the very opportunity I had been looking for. Plans were submitted, and the room you are in today is the result.

I think it is particularly appropriate to dedicate it on this Thanksgiving Day, bright and sunny as it is, and I want to say this is the happiest Thanksgiving Day of my life. It is my sincere hope that everyone who enters here will be benefited and made stronger by the services which will be heard inside.

It is announced from Washington that bids will be invited for the new Marine Hospital, at Buffalo, on or about February 1, 1907. It is expected that the work of construction will begin in the early spring.

BOOKS AND AUTHORS.

Surgery. Its Principles and Practice. By various authors. Edited by **William Williams Keen**, M.D., Professor of the Principles of Surgery and of Clinical Surgery in Jefferson Medical College, Philadelphia. In 5 volumes. Volume I. History, Surgical Physiology, Surgical Pathology, Infections, Tumors, Wounds. Large Octavo, pp. 983. With 261 text illustrations and 17 colored plates. Philadelphia and London: W. B. Saunders Co. 1906. (Price, cloth, \$7.00; half morocco, \$8.00, net prices).

The attractiveness of the field of surgery furnishes an inducement to both authors and publishers to prepare and print gigantic works, encyclopedic in character and exhaustive in method. The scheme of this treatise is to present a series of monographs, each complete in itself, by surgeons in various parts of the world, more or less distinguished in the subjects delineated, and which when completed shall be a practical exposition of modern surgical treatment.

This volume consists of twenty-two chapters and an index. Each chapter deals with a fundamental topic, such as, for example, inflammation, examination of the blood, gangrene, the process of repair, tuberculosis, and the like, and is complete in itself. The

contributors are, J. George Adami, John Bland-Sutton, George W. Crile, John Chalmers Da Costa, John C. Da Costa, Jr., Charles Harrison Frazier, Leonard Freeman, Ludvig Hektoen, Edward Martin, James Gregory Mumford, Edward Hall Nichols, Eugene Alfred Smith, and Francis Carter Wood.

The chapter on traumatic fevers is written by Eugene A. Smith, of Buffalo, and is one of the features of the book. Dr. Smith attacks the faulty nomenclature applied to these fevers and proposes a simplified classification. He would do away with many terms which are used indiscriminately, such, for example, as sapremia, blood-poisoning, autoinfection, septicemia, and the like, as incorrect, misleading, and unnecessary. He gives good and sufficient reasons for discarding these terms, and offers in their stead as a simpler classification the division of traumatic fevers into two general varieties: the aseptic, and the septic. Theoretically and clinically, he says, the septic type admits of ready subdivision into two forms,—septicemia and pyemia. He would not coin new terms but he would limit and define the terms we now employ.

Dr. Smith has written a scholarly disquisition on this topic which every surgeon,—even every physician,—should read with care. It puts a new color on an old subject, freshens and rejuvenates it, and makes it read like a story; and, withal, it is so fascinating that one cannot put it aside until he has finished reading it in its entirety.

The chapter on surgical tuberculosis by the senior Da Costa is another monograph of special interest. Rarely has so much scientific material relating to this topic been presented in such condensed form, all the later views being set forth, and the history of surgical tuberculosis, also, being related from our earliest knowledge of the subject. The final chapter, which deals with wounds and contusions is written by George W. Crile, and is still another section of the work that deserves special mention. It is quite unnecessary to go into detail as to the merits of this chapter but it deserves thoughtful reading as a whole, while the subtopic, shock and collapse, is worthy of study and deserving of praise.

The editor is a surgeon of such large experience, a teacher of such renown, and an author of such fame that it could not be otherwise than that he should put forth a superior treatise. The work is carefully edited, the illustrations are artistic, and the printing is excellent. When completed, it is destined to take permanent place in surgical literature.

The Prophylaxis and Treatment of Internal Diseases. By F. Forchheimer, M.D., Professor of Theory and Practice of Medicine and Clinical Medicine in the Medical College of Ohio (University of Cincinnati). Octavo, pp. 669. New York and London: D. Appleton & Co. 1906. (Price, \$5.00, net).

The prevention of disease is the special prerogative of the twentieth century physician. It is, therefore, of the utmost im-

portance that he should make himself familiar with every phase of prophylaxis, in order that he may apply its principles to all conditions at a moment's notice.

The various diseases are dealt with in their natural groups. First, come the infectious diseases; second, the diseases produced by animal parasites; third, the intoxications; fourth, constitutional diseases; fifth, diseases of the digestive system; sixth, diseases of the respiratory apparatus; seventh, diseases of the circulatory system; eighth, diseases of the blood and the ductless glands; ninth, diseases of the kidneys; tenth, diseases of the bladder; eleventh, diseases of the male sexual organs; twelfth, diseases of the nervous system.

Each individual disease in its respective group is taken up and its prophylaxis and treatment are set forth succinctly, sometimes tersely, but always intelligently. Especially in the line of treatment are the methods laid down those of later experiences. Care has been taken, also, to recommend whenever possible those methods best adapted to private practice. It is in all its details a work that is suited to the requirements of an active daily professional life,—to the physician we have become accustomed to hear somewhat tritely called a "busy doctor."

It is, moreover, a work of great breadth and is written by a man of extensive clinical experience, a resourceful teacher of enlarged views, capable of imparting his knowledge to others without unnecessary verbiage, but with a forcefulness that makes it lasting and a clearness that lends a charm to its reading or study.

Its claims may be thus summarised: it is in a class by itself, it being the first book of its kind published in this country; it is both a practical and a scientific exposition of the topics with which it deals; it is a safe guide and may be accepted as such with perfect confidence; it is a complete digest of the most modern methods of preventive and curative medicine; and, finally, it fills the gap in literature between the manual of treatment and the textbook of practice. It is complete in itself and will be in demand by the general practitioner of medicine who desires to keep pace with the latest thought concerning the prevention and treatment of disease.

Medical Jurisprudence, Forensic Medicine, and Toxicology. By **R. A. Witthaus**, A.M., M.D., Professor of Chemistry, Physics and Toxicology in Cornell University; and **Tracy C. Becker**, A.B., LL.B., Professor of Criminal Law and Medical Jurisprudence in the University of Buffalo. Vol. I. Octavo, pp. LV-996. Second edition, New York: William Wood & Co. 1906. (Muslin, \$6.00; Law sheep, \$7.00, net prices).

It is twelve years since the first edition of this great work was issued and though changes in this department of medical science are not as speedy as in most others, yet they have been sufficient to justify some revisions, some additions, and some eliminations. The general style and makeup of the work, how-

ever, remain unchanged and this volume might easily be mistaken for the first volume of the former edition.

The first section of the text in this book is written by Mr. Becker and deals with the legal relations of physicians and surgeons. This topic includes the acquirement of the right to practise medicine, their legal duties and obligations, their right to compensation, their privileges and duties when summoned as witnesses in courts of justice, and their liability for malpractice. Every physician should familiarise himself with the six chapters of this section. The next section, written by Mr. Boston, of the New York bar, presents the law of evidence concerning communications between patient and physician. Mr. Boston also has prepared a synopsis of the laws regulating the practice of medicine in the United States, Great Britain and British North America, from the latest statutes, with annotations. This synopsis constitutes a section of about 600 pages, and is the most complete compilation yet published. It is an invaluable record for reference.

The next section is written by Mr. Becker and relates to the legal status of the dead body. It comprises questions regarding the disposal and obligations to dispose of the body, how and by whom it may be exhumed or removed; autopsies and by whom they may be ordered; and the rights of relatives and accused persons. An appendix to this section contains a synopsis of the statutes of the different states and territories concerning these several questions. A section follows on medico-legal autopsies, by H. P. Loomis; and then comes a section on personal identity, by Irving C. Rosse; another, by H. P. Loomis, on the determination of the time of death; and, finally, two sections by E. V. Stoddard entitled respectively, death by heat and cold, and death by starvation.

The foot notes are very elaborate and voluminous adding very much to the value of the treatise and facilitating reference to other works. It is an indispensable treatise for lawyer, physician and chemist, and speaks with authority on the topics of medical jurisprudence, forensic medicine, and toxicology.

International Clinics. A quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A.M., M.D. Volume III. Sixteenth series. 1906. Philadelphia and London: J. B. Lippincott Co. (Cloth, \$2.00).

This number is rich in quality and quantity. Four articles on treatment are distributed as follows: treatment of acute pleurisy, A. A. Stevens; treatment of certain forms of bronchitis, Joseph M. Patton; treatment of dilatation of the heart, William H.

Katzenbach; Fournier's recent modification of his treatment of syphilis, H. Saingery.

The articles on medicine are thus distributed: autointoxications and their treatment, Edward C. Hill; multiple ulcers of the pylorus and gastrosuccorrhea (Reichmann's disease) without stagnation in the stomach, Maurice Soupault; accidental rashes occurring in the course of 250 consecutive cases of typhoid fever, Dr. J. Milton Miller; the irregular heart—its causes and treatment, Bertram Abrahams; diagnosis of some chronic joint affections, H. S. Clogg; predisposition to, and prevention and treatment of, pulmonary tuberculosis, John W. Wainwright; milky urine, F. X. Gouraud; life in the antarctic from a medical point of view, J. H. Harvey Pirie.

In the department of surgery we find the following articles: hyperemia treatment of swollen joints, E. H. Bradford; surgical complications of pneumonia and their treatment, T. Turner Thomas; preliminary note on a rational operation for the radical cure of inguinal hernia, A. N. McGregor; inguinal hernia in the female, E. Scott Carmichael; clinical significance of peritoneal adhesions, Charles Greene Cumston; hemorrhagic diathesis complicating surgical work, Frederick Griffith; surgical results which may follow improper feeding, Edred M. Corner; disorders of the umbilicus with special reference to the newborn and infant.—II. Umbilical fistulas, sinuses, and cysts, A. Ernest Gallant.

In obstetrics and gynecology the articles are: tubal pregnancy terminating in spontaneous recovery without operation. (also several other titles), Thomas J. Watkins; use of forceps in deep transverse arrest of the head, Charles B. Reed; the pelvis of lame women, A. Pinard. In rhinology there is one article entitled, clinical rhinometry—functional examination of the nose, Marcel Lermoyez; in otology one article entitled, primary thrombosis of the jugular bulb, Barton H. Potts, and in pathology one article entitled, leukemia and sarcomatosis, G. Banti. This exhibit of the contents and the authors will convey an intelligent idea of the value of the book. It is exceptionally well illustrated and becomes an important part of the medical literature of the year.

The Practice of Pediatrics by American and English Authors.

Edited by **Walter Lester Carr**, M.D., Consulting Physician to the French Hospital; Visiting Physician to the Infants' and Children's Hospital, New York. In one octavo volume of 1014 pages with 199 engravings and 32 full page plates in colors and monochrome. Philadelphia and New York: Lea Brothers & Co. 1906. (Cloth, \$6.00; leather, \$7.00; half morocco, \$8.00, net prices).

This is the second number issued of the series known as the practitioners' library, embracing the fields of gynecology, obstetrics, and pediatrics. It is, we believe, the first time this special topic has been dealt with in encyclopedic form. The contributors for the most part, are distinguished pediatricists in

America and England and their opinions are entitled to that respect which experience and knowledge engender.

The work is essentially clinical in character and is distinguished for the emphasis given to treatment. Infant feeding, a knowledge of which is so important in the intelligent care of children sick or well, is given prominence, and diseases of the alimentary tract are presented in much detail. Disorders of nutrition, so frequently obscure and difficult to manage, are presented with special clearness; diseases of the circulation and of respiration are handled with great skill; contagious diseases, so important as to early diagnosis, receive that careful description which is so needful to their recognition and management; diseases of the nervous system, of the glands, of the lymphatic system, and of the skin, are all set forth in the most modern fashion.

Diagnosis is given that prominence all through the book which its great importance requires and the employment of the best methods is insisted upon. Physicians skilled in internal medicine, in therapeutics, in obstetrics, and in dermatology have been laid under contribution, the result being a most comprehensive and thoroughly modern treatise,—one that will take first place as a book of reference for the practitioner as well as a guide to the clinician. The illustrations are of a character that give increased value to the text.

Modern Clinical Medicine. Vol. III. Diseases of the Digestive System. Edited by Frank Billings, M.D., Professor of Medicine, University of Chicago; Professor of Medicine and Dean of Faculty, Rush Medical College. Octavo, pp. xvi-824. With 45 illustrations. New York and London: D. Appleton & Co. 1906.

It is a fortunate circumstance that Professor Billings was prevailed upon to edit this volume, for certainly no American physician is more competent to deal with diseases of the digestive system. It is the third volume in the series of modern clinical medicine, and should receive the attention of every clinician who teaches internal medicine.

There is less uncertainty nowadays in the diagnosis and treatment of these affections since much that formerly was theoretical has passed into the realm of established fact. Chemistry has done much to accomplish this result, while the study of metabolism has contributed greatly to clear up doubt. The functions and diseases of the pancreas are under the searchlight of investigation, while the study of the feces is being pursued to an extent never thought possible or important, but with marvelous results in relation to diseases of the intestinal tract.

These studies and investigations have resulted in making such a volume as this possible, and its benefits to mankind will be far-reaching as well as lasting. It must not be forgotten, moreover, that abdominal surgery has thrown much light on the problems dealt with in this book and has led to the solution of some of the most difficult of them. It is a twentieth century

work in every sense of the word and cannot fail to take its place in the forefront of the best medical literature of the day.

A Treatise on the Motor Apparatus of the Eyes. Embracing an Exposition of the Anomalies of the Ocular Adjustments and their Treatment, with the Anatomy and Physiology of the Muscles and their Accessories. By George T. Stevens, M.D., Ph.D. Illustrated with 184 engravings, some in colors. 496 pages, Royal Octavo. Philadelphia: F. A. Davis Company. 1906. (Price, \$4.50 net).

In these days of work and worry, eyestrain plays no inconsiderable part as a cause of the nerve tire that results from the strenuous life of the period. The author of this book is an ophthalmologist of great experience and has presented a work that will command the attention of everyone who gives special study to the eye or who makes its diseases a special line of practice.

The book is replete with ingenious tests to determine anomalies of the motor apparatus and of equally ingenious devices for their correction. Dr. Stevens enters into minute detail in the descriptions of his methods and of the instruments which he has devised or modified for their application. Much that here appears he has presented heretofore in the form of monographs or society papers; much, also, is published for the first time, all of which is worked into a homogenous, compact form, that becomes an interesting and instructive exposition of the author's views and methods of practice.

It is a handsome book, beautifully illustrated, and a valuable addition to the literature of ophthalmology.

The Practitioners' Visiting List for 1907. A pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording the details of practice. The weekly, monthly and 30-patient perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-patient perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil and rubber, and calendar for two years. Price by mail, postpaid, to any address, \$1.25. Thumb-letter index, 25 cents extra. Philadelphia and New York: Lea Brothers & Co., Publishers. 1906.

This excellent book, the successor of the Medical News visiting list, is so accurately described in the heading prepared by the publishers, that very little remains to be offered by the writer. It is proper to remark, however, that it is in its twenty-first year of publication, hence contains all that such a long experience indicates as essential for the daily needs of every busy physician. The text has been revised to meet present conditions and contains, among other things, a scheme of dentition; tables of weights and measures and comparative scales; instructions for examining the urine; diagnostic table of eruptive fevers; incompatibles, poisons and antidotes; directions for effecting artificial respiration; extensive table of doses; an alphabetical table of diseases and their remedies, and directions for ligation of arteries.

The record portion contains ruled blanks of various kinds, adapted for noting all details of practice and professional business. It is difficult to see how a book of this kind could be more complete.

The Practical Medicine Series of Year Books. Ten Volumes. Issued under the general editorial charge of **Gustavus P. Head**, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vols. IV and V., series of 1906. Chicago: The Year Book Publishers. 1906. (Prices, \$1.50, \$1.25; entire series, \$10.00). Vol. IV. Gynecology. Edited by **Emilius C. Dudley**, A.M., M.D., and **C. von Bachellé**, M.S., M.D.

This interesting resume of the additions of value to the literature of gynecology for the year 1905, is prepared by men of experience who are accustomed to sort the vast material offered with careful judgment. Early diagnosis in uterine carcinoma receives marked attention, while Dudley's management of urinary incontinence is described and illustrated. Various other operations are presented, such as perineorrhaphy, displacements, tumors of the vulva, and the like, all of which are admirably illustrated. It is the best gynecological abstract we have met, and should be prized by all who practice in this field.

Vol. V, Obstetrics. Edited by **Joseph B. De Lee**, A.M., M.D., with the collaboration of **D. Roehler**, M.D., and **Herbert M. Stowe**, M.D.

In this book vaginal Cesarean section is admirably delineated, both in text and illustration; the complications of pregnancy are worked out to considerable extent; eclampsia is still undergoing investigation; while operative obstetrics is given due prominence. The puerperal infections receive considerable attention, especially their surgical management, and the diseases of the newborn are appropriately dealt with. Every obstetrician will derive benefit from this grouping of obstetrical progress, which has been done with the intelligent brain and hand of a master, the practical side of the subject being kept constantly in view.

Thornton's Pocket Medical Formulary (heretofore known as *The Medical News Pocket Formulary*). New (7th) edition, revised to accord with the new U. S. Pharmacopeia, containing more than 2,000 prescriptions with indications for their use. In one leather bound volume. Philadelphia and New York: Lea, Brothers & Co., Publishers. 1906. (Price, \$1.50 net).

This useful reminder contains many valuable hints, and may well be kept at hand by every busy physician. The changes in the new pharmacopeia have been conformed to, and other revisions have been made, making it in every way a present-day prescription book. It also contains a table of doses, a list of incompatibles, a summary of poisons and antidotes, as well as much other information that may be drawn upon to refresh the memory in the presence of an emergency. It is in reality a scientifically arranged book of formulæ, with annotations giving indications for the use of each prescription, and is full of valuable suggestions.

Lea's Series of Medical Epitomes. Edited by **Victor C. Pedersen**, M.D. *Materia Medica and Therapeutics* by **Edward J. Kiepe**, M.D., Adjunct Professor of *Materia Medica* in the Medical Department, University of Buffalo. 12mo., pp. 265. Philadelphia and New York: Lea Brothers & Co. 1906. (Price \$1.00).

The topic dealt with in this book is one that can be presented in epitome form with considerable clearness. Professor Kiepe certainly has made a very attractive little manual, giving the essentials of his subject in direct fashion, without superfluous verbiage. The directions relating to prescription writing are excellent and may be studied by some of the older members of the profession with propriety. The drugs described are arranged in alphabetical order, which makes them easily accessible. The eighth decennial revision of the pharmacopeia has been conformed to as far as applicable, and the entire work shows a finish that is praiseworthy.

Blakiston's Quiz Compend. *Genitourinary Diseases and Syphilis.* By **Charles S. Hirsch**, M.D., Assistant in the Genitourinary surgical department, Jefferson Medical College. 12mo., pp. 351. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1906. (Price, \$1.00).

Hirsch has made an excellent condensation of these subjects and the book will be welcomed both by students and quiz masters. The most that can be expected to be accomplished by such a book is to gain an abstract of the essentials, leaving the minute details to the textbooks. A vast amount of useful material, however, has been grouped in these pages which will serve to lighten the task of those for whom the book is intended. The practitioner, too, can even find hints in it that will not come amiss during his busy work.

Annual report of the Department of Health of the City of Buffalo; for the year ending December 31, 1905. **Walter D. Greene**, M.D., Health Commissioner. Buffalo: Hausauer-Jones Printing Company. 1906.

The annual death rate during 1905, according to this report, was 14.14 per 1,000. The tables show a decrease in communicable diseases, and, contrary to the general belief, a lower death rate from tuberculosis than that of most large cities. The mortality rate of the first five years of life is indicated to be 4.05,—a remarkable showing. These and various other facts exhibited by this report testify to the efficiency of the department in a conclusive manner. The time is ripe, however, for the health department to consider the propriety of making war on the smoke and noise nuisances, and it should take action to prevent spitting on the sidewalks. A crusade against these three intolerable conditions would be a credit to the city.

BOOKS RECEIVED.

A Practical Treatise on Materia Medica and Therapeutics, with especial reference to the clinical application of drugs. By John V. Shoemaker, M.D., LL.D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia. Sixth edition. Thoroughly revised. (In conformity with latest revised U. S. Pharmacopoeia, 1905.) Octavo, 1244 pages. Philadelphia: F. A. Davis Company. (Price, Cloth, \$5.00; Sheep, \$6.00, net prices).

The Diseases of the Nose, Throat and Ear. By Charles P. Grayson, M.D., Clinical Professor of Laryngology, Medical Department, University of Pennsylvania. New (2d) edition, revised and enlarged. Octavo, about 550 pages, with 152 engravings and 15 plates in black and colors. Philadelphia and New York: Lea Brothers & Co. 1906. (Cloth, \$4.00, net).

The Practical Medicine Series of Year Books. Ten volumes. Series of 1906. Issued under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. VIII. Materia Medica and Therapeutics; Preventive Medicine; Climatology and Forensic Medicine. Edited by George F. Butler, Henry B. Favill, Norman Bridge, Daniel R. Brower and Harold N. Moyer. Chicago: The Year Book Publishers. (Price, \$1.25; entire series, \$10.00).

Progressive Medicine, Vol. VIII, No. 4, December, 1906. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 349 pages. Philadelphia and New York: Lea Brothers & Co. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00; carriage paid to any address).

Manual of Artificial Limbs. Copiously illustrated. Octavo, pp. 430. A. A. Marks, 701 Broadway, New York.

Transactions of the Section of Obstetrics and Diseases of Women of the American Medical Association at the fifty-seventh annual meeting, held at Boston, June 5-8, 1906.

Transactions of the third and fourth annual conferences of State and Territorial Health Officers with the United States Public Health and Marine Hospital Service, held at Washington, D. C., May 15, 1905, and May 23, 1906. Two volumes. Washington: Government Printing Office.

LITERARY NOTES.

THE *Long Island Medical Journal* is the title of a new local publication, edited by Dr. Paul M. Pilcher, and published under the auspices of the Associated Physicians of Long Island. This journal, says the Brooklyn Medical Journal, will in a great measure take the place of the Brooklyn Medical Journal, which ceases publication with the December issue. It will cover all the Island news, reporting transactions of all the county societies, and in addition give full accounts of the meetings of the different

sections of the Kings County Medical Society. It will be almost distinctively a local journal, and as such should receive generous support. The first number will be published in January, 1907, and will appear regularly the fifteenth of each succeeding month.

THE *Brooklyn Medical Journal* announces in its issue for December, 1906, that its publication ceases with that number. It has been published for twenty years and is the kind of journal from which we regret to part. As the official organ of the Medical Society of the County of Kings it has proved itself not only loyal to the interests of the society, but has taken high place in the journalistic literature of the country.

THE *Oklahoma Medical News Journal*, beginning with January, 1907, will be edited by Dr. Y. E. Colville of Chattanooga, Tenn. Dr. Colville has purchased a half interest in the magazine and will devote his entire time to the editorial department, while Dr. Phelan will continue as business manager. It is announced that the journal will be considerably enlarged as well as otherwise improved.

THE *Gazette Médicale de Paris*, the oldest medical journal in France, will henceforth be published under the editorship and management of Dr. Lucien-Graux, who is also editor in chief of the *Gazette des Eaux*.

ITEMS.

THE famous Bowery Mission Bread Line, now in its fourth year, at which every morning, at one o'clock, during the winter months, one thousand homeless and destitute men and boys are provided with a breakfast of hot coffee and rolls, resumed operations at Thanksgiving, midnight, and will continue to Easter morning, 1907. Last year, 144,000 were thus assisted, and altogether over half a million have had a weary night's tramp agreeably interrupted by this inexpensive, yet very welcome refreshment.

The Directors of the Bowery Mission have appointed Mr. John C. Earl, of 222 Bible House, New York City, Financial Secretary, succeeding Dr. Simon Trenwith, lately deceased.

"BEAUTY AS A FACTOR IN DISEASE."—The New York Pharmaceutical Company, Bedford Springs, Bedford, Mass., has just issued a most interesting and instructive booklet under the above title, which gives in detail the various methods adopted by the female sex of the many savage and semicivilised tribes to in-

crease their attractiveness to the eyes of the male portion of their tribe or race. In some instances this so called improvement or attractiveness is carried to that degree of regional development that locomotion is impossible. A copy of the booklet will be sent upon application.

SPEAKING in reference to the wide use of effervescent beverages, it is admitted that carbonic acid gas in mineral waters greatly improves digestion, and that this is especially so in the case of Apollinaris, because its mineral constituents give additional help in that direction, so that Apollinaris is by far the best of the few naturally effervescent waters for mixing with whiskey, wine, fruit syrups, or milk. The consumption of effervescent liquids is especially large in Great Britain and the United States.

THE ANTIKAMNIA CHEMICAL COMPANY, as appears from their new advertisement in this issue, was prompt to file its guaranty under the new pure food and drugs act, their guaranty number being 10, showing that of all the food and drug manufacturers in the United States only nine filed their guaranty before that of this company. This action is but another instance of the promptitude of the Antikamnia Company to comply with the law in every particular.

THE MOET & CHANDON CHAMPAGNE, White Seal, vintage of 1900, is a superb wine for the sick. It should be prescribed by the physician and not taken by the patient at inappropriate times nor in improper quantities. It may, also, be stated with great propriety that it is the finest table champagne that is marketed at the present time. A trial of this celebrated wine for either purpose named will prove more convincing than mere words.

MESSRS. M. J. BREITENBACH COMPANY, 53 Warren Street, New York, are sending out their useful physician's memorandum book for 1907. It is one of the best desk diaries published and is so well known and appreciated that a description is unnecessary. A larger edition goes out this year than ever before but if any physician has been overlooked, an application made to the Breitenbach Company will secure the book by next post.

"THE ANTIPHLOGISTINE GIRL," a handsome photograph of a still more handsome nurse, in a Red Cross uniform, and in a tasteful frame, has been sent to the JOURNAL by the Denver Chemical Manufacturing Company, the makers of Antiphlogistine, for which we extend our best thanks.

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

FEBRUARY 1907.

No. 7

ORIGINAL COMMUNICATIONS.

Infantile Scurvy.¹

By C. W. M. BROWN, M. D., Elmira, N. Y.

INFANTILE SCURVY is a disease of modern times and is attributable to altered conditions arising from over-civilization and from the crowding into cities, which makes it difficult or impossible for children to be fed in an ideal manner. There has been a steady diminution, during the last half century, in the number of children who are fed in the natural mammalian fashion,—at the mother's breast. It is less than thirty years since the nature of the disease was recognised by Cheadle, his first paper appearing in 1878. His article, in which he insisted on the identity of infantile and adult scurvy, was published in 1882, but his views were somewhat slow in gaining general acceptance, and the truth of his contention was not thoroughly established until a paper was read by Sir Thomas Barlow on this subject before the Royal Medical Society in 1883.

"Scurvy is a constitutional disease due to some prolonged error in diet." Among its symptoms are spongy, bleeding gums, swelling and ecchymoses about the joints, especially the knee and ankle, hemorrhage from the nose and occasionally from other mucous membranes, hematuria, extreme hyperesthesia and often pseudoparalysis of the lower extremities. These local symptoms are usually accompanied with anemia. Scurvy and rickets are frequently associated, but are not necessarily connected and are not different forms of the same disease. A large majority of the cases occur between the sixth and fifteenth months and half of them between the seventh and tenth months. The greater number are seen in private practice, often in the midst of the best surroundings. The only important etiological factor yet known to bear any relation to scurvy is the diet. The most marked effects of scurvy are seen in the bones, bloodvessels and the blood. The most marked lesion is sub-periosteal hemorrhage and may occur almost anywhere in the body, but chiefly affects the bones of the

1. Read at the meeting of the Elmira Academy of Medicine, September 5, 1906.

lower extremities and may reach from the knee to the great trochanter, or from the ankle nearly to the knee. Effusions may also be found between the muscles and blood may infiltrate the cellular tissue in the neighborhood of the joints. The bones themselves may also be affected. Separation of the epiphyses of some of the long bones, generally at the lower end of the femur or lower end of the tibia, is found in most of the fatal cases.

In cases, which have been carefully observed, there may be noticed before the evidences of scurvy appear a pallor, general indisposition and fretfulness, with failing nutrition, but usually tenderness of the bones is the first symptom noticed. At first it may be only slight and indefinite in character, so as to cause the infant to cry upon handling. Later, it becomes constant and more acute. Swelling may appear about the ankles and knees. There may be some changes in the gums, which are more apt to appear if the child has teeth. They are of a purplish color, swollen, bleed upon the slightest rubbing, sometimes spontaneously. Ulcerations are more apt to appear about the upper teeth. The child is cross, sleeps badly, loses color, weight, and appetite. Symptoms usually come on gradually and may continue for some weeks without any very marked impression upon the child's general condition. Not infrequently, however, symptoms appear rather suddenly, when they are usually ascribed to an injury, real or supposed. If the symptoms are not recognised, the pain and tenderness of the bones increase so that the child will lie motionless and no voluntary movement can be excited. Pain and tenderness are present in 95% of the cases. Paralysis is often suspected. Ecchymoses are frequently seen, especially about the large joints and often confirm the opinion previously formed, that the child has met with some accident. Bleeding may occur from the mouth, pharynx, or bowels. Blood may be vomited or passed in the urine.

The urine was very carefully observed in 35 of Morse's cases. It was normal in 20 and abnormal in 15. In three of these, however, it was merely noted that it stained the diapers red or brown. Excepting pallor, it was the first symptom noted in eight of the proved cases of scurvy and was the only symptom in two. Unless recognised the symptoms increase in severity and conditions grow steadily worse until death occurs from general weakness, sudden heart failure, or from some complicating disease, such as bronchopneumonia or acute gastroenteritis. Separation of the epiphyses from the shaft of some of the long bones generally at the lower end of the femur or tibia is found in most fatal cases.

In 1898 the American Pediatric Society made a collection embracing 379 cases. Of these, twelve had breast milk, alone, in ten; five, raw cow's milk, without any other food in four; twenty, pasteurized milk—sixteen without any other food; sixty, condensed milk—thirty-two with no other food; one hundred and seven, sterilised milk—sixty-eight without any other food; and two hundred and fourteen had proprietary infant foods.

Cheadle gives details of the previous feeding in sixty cases of infantile scurvy observed by him; of these, forty-six were taking various patented foods, thirteen of these having a certain amount of milk said to be fresh, at the same time; and among the remainder three were taking peptonised and seven sterilised or humanised milk.

Morse, of Boston, in a recent article, reporting fifty cases occurring in his own practice, says: "From the point of view of modern ideas of reasonable infant feeding the food was irrational, in nineteen of the cases taking proprietary foods, in four of those taking milk mixtures and in the case of one on general diet, making a total of twenty-four. Milk was used in the preparation of the food in forty-one cases, while no milk was used in eight cases. In the forty-one cases in which milk was used in the preparation of the food, the mixture was boiled in twelve, pasteurised in nineteen and unheated in nine, while in one case there was no data as to whether or not heat was used. The food was also peptonised in four of the pasteurised and one of the unpasteurised mixtures. The mixture was too weak in five cases and the same mixture was continued for months in two cases. In only one case was a rational mixture being taken and that was prepared with barley water instead of water. The digestion was good in twenty-three and feeble in twenty-seven of these cases, apparently showing that the scurvy was not due to disturbance of digestion and that foods may cause scurvy without causing disturbance of digestion."

A short time ago there was an epidemic of infantile scurvy in Berlin, among children supplied with pasteurised milk from an institution, but it was found to be confined to children whose parents, as an additional precaution, boiled it for some time after it was delivered to the house. Out of twenty-five severe cases seen by Colman in hospitals and private practice, nineteen were taking some kind of dried infant food as staple diet, seven having a certain amount of fresh milk as well, the remaining six were taking sterilised milk or humanised milk, or milk sterilised by long heating.

The disease with which infantile scurvy is most frequently confounded, is rheumatism. Holt says that fully four-fifths of the cases which have come to his notice, have had that diagnosis made. The extreme rarity of rheumatism under one year should

always make one cautious, and pain and tenderness in the legs only should in an infant invariably suggest scurvy rather than rheumatism. He says that many cases of scurvy come into the hands of the orthopedic surgeon. He has known a diagnosis of malignant disease to be made from the cachexia or discoloration and the pain. He has known two cases to be operated on by eminent surgeons, one with the diagnosis of sarcoma, and one of osteitis of both tibiae.

The cases probably which are most easily missed are the slight cases where there is only hematuria or epistaxis present. Of the fifty cases reported by Morse, a correct diagnosis had been made in but five. The diagnosis in the other cases were acute nephritis 1, excess of uric acid with consequent staining 2, arsenical poisoning with inflammation of the kidneys 1, rickets 2, spinal or Potts disease 6, hip disease 1, periostitis 1, rheumatism 6, gout 1, syphilis of cord 1, difficult dentition 5—in four of which the gums had been lanced,—strain 1, injury 1, tuberculosis 1, gumma of eye 1. In two other cases the physicians stated they had no idea what was the trouble. While Morse himself states that he has mistaken congenital syphilis and hematuria from lead poisoning for scurvy.

Recently, Snow, of Buffalo, reported a very interesting case of hemorrhage into the orbit, with otherwise typical symptoms of scurvy, which had been seen by eight ophthalmologists without a correct diagnosis having been made. Yet the diagnosis of scurvy seldom presents any difficulty to one having once seen a case. If the essential features of the disease are kept in mind,—the soreness of the limbs, spongy, swollen gums, swelling near the large joints, a tendency to hemorrhage and a history of the prolonged use of some proprietary infant food, or sterilised, pasteurised or condensed milk. Scurvy is frequently associated with rickets. Of 340 cases reported in the American Pediatric Society investigations, in which this point was noted, symptoms of rickets are present in 152 or 45%, while in 55% rickets were absent. It is stated that in fifty of these cases the rickets antedated from the development of the scurvy. There were signs of rickets in forty-one cases out of fifty observed by Morse. The association of the two diseases is so frequent that by many of the English writers they are still spoken of as one disease—scurvy-rickets.

The prognosis is always good if the disease is recognised early. No patients with symptoms so serious improve with such marvelous rapidity as those with scurvy under prompt management. It is only when the disease is of long standing and the malnutrition is severe, or when serious complications in-

volve the digestive tract, that the issue becomes doubtful. Any case allowed to go on may result fatally. It is rare that scurvy leaves any permanent effect. Recovery is not only rapid but complete and relapses are extremely rare.

The treatment is simple; stop all proprietary foods, condensed milk, sterilised milk, and substitute a diet of fresh cow's milk adapted to suit the child's digestion. With this treatment, improvement will soon begin and recovery will follow. However, the addition of fresh fruit juice, preferably orange juice, is of the greatest value and when given improvement is much more rapid. From half an ounce to four ounces may be given during the twenty-four hours. Other things of value are fresh beef juice, and for older children fresh vegetables and potatoes. The general condition, anemia, and malnutrition, should receive the proper attention. The fact remains then that when a child is artificially fed this can nearly always be satisfactorily obviated by supplying the child with milk as little altered as possible after it is drawn from the breast of the animal supplying it.

The diet statistics quoted show that while scurvy may develop occasionally upon almost any sort of food, several stand out more prominently—namely, pasteurised, sterilised, and condensed milks and proprietary infant foods. Analysis of these tables seem to show that the absence of freshness and the heating of the food are very important elements in the production of scurvy. The farther food is removed in character from the natural food of a child, the more likely is its use to be followed by the development of scurvy. Long continued use of the same percentages, at one time proper, has been followed by the appearance of scurvy. Formulæ should be changed from time to time as needed, and if patent foods and heated or condensed milks are used, their effects should be carefully watched, and they should not be continued as the sole diet for long periods. When scurvy and other diseases of nutrition have been proven to depend so completely upon diet, especially upon the use of patented foods, pasteurised, sterilised, or condensed milk, is it stating the fact too strongly to say that the use of these foods is radically wrong, may we not say it is almost criminal, for continuous infant feeding, when fresh, clean, cow's milk can be obtained?

In 1900 I reported to the Academy a fatal case of scurvy seen in consultation. The child was eleven months old and had the following history: was well since birth until about nine months of age, when a week or two after a supposed contusion the thigh began to swell and when seen was several times larger than the other. The skin was red, somewhat hotter than normal, and apparently fluctuated under palpation. The child was anemic.

much emaciated and for several days had had enterocolitis. The gums were generally swollen and purple, especially upon the upper jaw. The child had ten teeth. The food from birth until a few days before I saw it had been sterilised milk and Mellin's Food. The attending physician had made a diagnosis of osteitis or periostitis with a large collection of pus. In this view I coincided. The next day the femur was opened under anesthesia and the periosteum was found separated from the whole length of the shaft, the shaft itself being separated from the epiphysis. The separation of the periosteum from the shaft was made by effused blood, which was also found extravasated between the muscles. The child was very weak and died two days later from exhaustion. This case, as will be seen, presented a typical picture of scurvy.

A few months after that I saw at the New York Polyclinic a similar case, where the tibia alone was affected. This had been opened by a surgeon connected with the Babies' Hospital, who saw it before a correct diagnosis had been made. A wonderfully rapid improvement was made in this case by the use of orange juice, beef juice and fresh milk. The leg healed rapidly under antiseptic dressing. In this case, as in the one seen in consultation, the child had been fed on sterilised milk and Mellin's Food.

Case No. 3, a child somewhat over two years of age, was fed the first year on Mellin's Food, with the history of having done well for nine months, and later upon malted milk and finally upon Eskay's Food, when I first saw it at the age of about eighteen months. The digestion was exceedingly poor and the changes suggested in the food were imperfectly or improperly carried out, because the mother repeatedly and persistently overfed the child, both in quantity and quality, so that at no time was it properly and wisely nourished. During one of its temporary more acute attacks of indigestion the gums became purple, tender, swollen, and bled easily. No other symptoms were manifested. The administration of orange juice promptly relieved it.

Case No. 4 was seen in May, 1903. The following history will be drawn from a private letter recently received from the mother: "Was nursed for four weeks, but did not gain an ounce. Was weaned on that account, because the milk seemed of such poor quality. She was then fed malted milk, with the addition of plain milk, until she was three months old, then as she had not gained at all on that, was given Mellin's Food and milk, as my other two children had been brought up on that and I thought I understood the management of it perfectly. That food was continued until the case was put into your hands. She was about

nine months old when you saw her. The trouble, which caused your being called in, was the pain in her limbs whenever she moved them, which had begun about a week before, and that was the only symptom we had noticed, except that she had gained but a very few pounds since birth. She had had no previous illness, except occasional restlessness and fretfulness when she was cutting teeth. She had three upper and two lower teeth. I never saw anything work so like a charm as the orange juice you prescribed for her. In twenty-four hours the pain in her limbs was entirely gone." I may say in addition to the mother's story that the child was pale, flesh soft and flabby. Besides the orange juice she was given a properly modified cow's milk and improved both as to the scurvy and general nutrition as fast as could be anticipated, under the circumstances. I may add that the case had been treated for rheumatism by the attending physician.

Case No. 5, baby, age six months, born of healthy parents. Seen May 6th, 1906, when the following history was obtained: Nursed one week, fed condensed milk three weeks. At four weeks the baby was put upon diluted cow's milk. Mother cannot tell just how it was fixed. However, just before the baby was taken sick the mixture was "one-third milk, some sugar and the rest water." Besides, she says, the milk was dirty, poor in quality and kept badly. Baby often had colic, sometimes severe. Was given castoria every night, occasionally castor oil. April 26, the feet and legs began to swell and he had high fever and cried upon being lifted or being moved. I saw him May 6, when the feet and limbs were swollen half way from the ankles to the knees, and also both wrists. Cried lustily whenever feet or hands were touched. Abdomen distended with gas; temperature was 103°. Milk mixture was omitted, two teaspoons castor oil were given, no food until morning, then two teaspoons cream in four ounces water, with the juice of a whole orange in the twenty-four hours. Next day, May 7, there was still much abdominal distension and pain. The stools contained a very large amount of mucus, in fact, were almost pure mucus. Temperature still 103, but the feet and limbs were much less swollen and painful. Because of severe enteritis all milk was omitted and diet was restricted to barley water. Castor oil was continued every day in teaspoonful doses. He was still more comfortable on May 8, when the orange juice was omitted because of the gastro-enteritis, and he was given a tablespoon of raw beef juice three times a day, in addition to the barley water, the bowels were irrigated with normal saline solution twice a day. Because of the severe enteritis, improvement was gradual. The temperature did not become normal until May 16, when the swelling in the

ankles was practically gone and by the 20th he was taking a milk mixture containing 2% fat, 1% proteid and 5½% sugar. Was free from colic and other evidences of indigestion and in one month had good color and had made a marked gain in weight. In this case the food contained the proper elements, but they were badly proportioned and perhaps had some toxic property because of its poor keeping quality. Two physicians in succession had been in attendance upon the case and both had called the disease rheumatism.

A Plea for the Earlier Diagnosis of Appendicitis.¹

By ALBERT L. BEAHAN, M. D., Canandaigua, N. Y.

THERE is no abdominal disease of frequent occurrence that is of such virulent type as appendicitis. It comes usually during the night and strikes its victim with a sudden attack and with relentless cruelty. The storm spoils the appendix, leaving it a blackened, disorganised object of putrid material or some lesser pathological character, which nature may succeed in covering with bowel, or omentum, or cause it to adhere to the abdominal wall and shut off the infective area. There is need to have a line on the diagnosis of appendicitis and to be sure to know where to let that line fall.

Some of the cardinal points in the diagnosis of appendicitis are established. Sudden pain over the epigastrium, which gravitates to the right iliac region; nausea of a peculiar type that is easy and of startling quickness, to be succeeded by vomiting, being like the vomiting of pregnancy and thus showing its reflex character, are always known signs of appendiceal inflammation. To these add the rigid right rectus muscle with right side tenderness at or near McBurney's point, and the classical picture of appendicitis is produced.

What other guides to a correct diagnosis do we have? A halting gait, the right leg being dragged or stiffened when locomotion is attempted, is a very helpful aid, and should always be studied in obscure ambulatory cases. It is one of the old Potts abscess signs and was probably an unappreciated evidence of abscess about the appendix, as the old cold abscess of the right groin has been found in nearly 100% of cases to be of appendiceal and not of tubercular origin. The chronic sepsis of a pus inclusion in appendicitis gives a dirty, sallow complexion. Intestinal indigestion with gas formation, frequent colic, inability to partake of uncooked food without abdominal distention, is significant of carrying a diseased appendix.

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York, at Syracuse, October 16, 1906.

To these considerations the mind turns when the problem of diagnosis is to be solved. The relation of success to operative intervention demands the early diagnosis of this disease. The plea for its necessity is not born of any despair from recent experience. The contrary is true, as nearly five years of our own hospital life have passed with a mortality of but one case, which occurred on August 25, last, and that was a case of black easy vomiting, with pus from the ensiform to the pubes when the patient was admitted to the hospital.

The reason for the emphasis of early surgical measures is obvious to the experienced observer. To the physician who follows his cases to the operating table and there corrects his opinion, a fairly reasonable hope may be felt that observation can be depended upon to know when danger from appendicitis is imminent. But the power of analysis by the mind is not always keen. Experience must teach hard lessons to each practitioner of medicine. Only a few weeks since a case of appendicitis was mistaken for cholera morbus, and the patient insisted on walking some distance even while the pelvis contained the products of a ruptured appendiceal abscess, and three pitchers of sterile water were required to make a clean abdominal toilet. We apologise for so late a diagnosis.

Another recent case points a moral. The patient experienced a number of attacks of appendicitis during the past seven years. Last April a sharp disturbance occurred. When asked what his attending physician did for him, he replied that he emptied his stomach and gave him a hypodermic of morphine. The pain of an attack of appendiceal inflammation of simple type, can be relieved by calomel, castor oil and salines, even very speedily. If these measures do not relieve, the dictum should be to operate at once. It is criminal practice to benumb the cerebrum with morphine or other opiates for belly pains. No individual experience of itself can guide safely.

The outcome of operations by the abdominal route demands an early diagnosis of appendicitis. Before rupture of the appendix every case should recover within twenty-one days. After rupture every hour of exposure of the intestinal surfaces with their lymphatics, to the consequences of septic infection, lessens with an increasing degree the chance of recovery. The line of incision is usually infected in delivering the appendix and union is by slow granulating process. More or less tardy convalescence is to be anticipated. Another heresy that demands puncturing is, that the pulse must be relatively rapid and the temperature high to warrant a statement that the early diagnosis and early operative interference are important. If the appendix points among

the small intestines, or bends up over the ileocecal valve where the lymphatic glands are numerous, the temperature, indicating rapid inoculation of septic toxins, will be high and the pulse will respond as an inflammatory index. But if the appendix is against the abdominal wall, as say from an old attack with adhesions, or if it lays on the shelf formed by the iliac bone, just above Poupart's ligament, simulating and puzzling one to determine if it might not be enlarged inguinal glands, in these instances an ugly mixed infection may develop with but little constitutional disturbance.

Only a small percentage of appendicular inflammations can be diagnosticated in the early stages by pulse and temperature indications. If the appendix points away from lymphatic gland regions an abscess must form, as in a gangrenous inclusion, and rupture occur through the first line of defense, the first barrier wall, and septic products will leak into the abdominal cavity and reach the lymph channels before inflammatory signs show in pulse and temperature. It is safer not to trust the count of the pulse and not to put the thermometer into commission in settling an early diagnosis of appendicitis. To appreciate what serious changes occur in a few hours when symptoms are not over evident, one must often look into the open abdomen and study the pathology and correct the judgment by visual examinations.

The thickened infiltrated cecum, the separation of muscular and serous coats by a dissecting gangrenous process, the patches of lymph membrane, of diphtheric appearance, the binding together of bowels, the mothering omentum caring for a pocket of filth with sacred fidelity in simple cases, the petechial blood points on the peritoneal surface betokening a hemorrhagic infarction, or an ulcerated patch underneath in the mucous membrane of the bowel; these various phenomena give a true picture of the case when contemplated through the open incision. There is no other way to study appendicitis. Theorising is useless. Temporising with cold storage or salad oil, is foolhardy, even criminal. Pathological changes go on, even if ice is a few inches above the diseased section and the cecum can be unloaded to relieve the gas pressure, but acute and, later, chronic stricture prevents the normal appendiceal current from discharging its contents very completely.

In some subjects pain is not great, depending on the nervous development of the individual, but pain must remain the chief guide. Unrelieved tenderness with exacerbations of pain are of some importance, but sudden cessation of pain signifies the gangrenous condition. During the month of August, last past, five cases of appendicitis entered the Canandaigua Hospital, having ruptured appendiceal abscesses of four to twenty-four hours'

duration, with pus in the pelvis and intestinal folds. They were all of the desperate sort and occurred in a period of weather when great humidity and high temperature were giving general bowel troubles of deep mucous membrane type, dysentery prevailing, and great prostration of the sick was noticeable. Each of these cases had a gangrenous appendix with abscess. I dawdled with one of the cases for need of an early diagnosis. He walked with no hitch of right leg, which fact was explained when we found free pus, and appreciated that both recti muscles and both psoas muscles were splinting the inflamed intestines, and we recalled that he stooped when walking and really limped, or dragged both legs in a peglegged sort of gait. He was a foreigner and this obscured the history and salved professional pride.

The early diagnosis of appendicitis is not made with the hypodermic syringe and morphine, not with calomel and salts, not with ice packs, starvation and rectal feeding, not with salad oil or castor oil. It is made by watching at a distance from the patient the tense face of distress. By the history of gastric disturbance, settling toward the navel and right iliac region; by easy vomiting. It is settled by the finger tips, appreciating that the right or left rectus, or both, are harder than normal, and by finding a sore spot at the right side of abdomen, somewhere below the liver, above Poupart's ligament, and without the umbilicus. It may be added that rest and procrastination are not available aids. In the last five years, or nearly so, no appendicitis case remains in our hospital to exceed an hour, before the appendix is removed. Probably more night than day operations are done. The month prior to establishing this rule we had a mortality of two and we believe one of these was due to waiting over night before operating. To the physicians who are so alert and bring their patients to the hospital so promptly, is due much of the credit of a normal or no mortality result.

With such flattering results, associated with a definite plan, errors must lessen. A saving technic is required to win desperate cases and establish in the minds of the profession and the laity, a confidence in operative interference. Then the appreciation that better results can be had if the appendix were removed earlier follows as a natural reasoning, and the community is won for the scientific surgical position.

18 GORHAM STREET.

ECZEMA of the breast should always be viewed with suspicion, for it may be a symptom of Paget's disease and precursory to cancer. In these cases the growth may for a long time appear as a superficial ulcer, and thus lead to errors in diagnosis.—*International Journal of Surgery*.

The Prevention of Tooth Decay.¹

By FRANK W. LOW, Buffalo, N. Y.

THAT the teeth of men are immune from decay because of the habit of smoking tobacco, is a saying almost as old as smoking tobacco itself. The observation of many generations has made the saying pass current to such an extent that, viewed as a prevention, it might rightly be classed with other empirical medication. Recent laboratory investigation, however, leads pointedly to the belief that the saying is true, and the following observations furnish the theory upon which the proving rests.

All normal human saliva has in it a certain portion of potassium sulphocyanate,² but in mouths where rapid and general decay of the teeth is progressing, it is invariably found that potassium sulphocyanate is conspicuous for its absence. Saliva from the mouths of smokers invariably has a generous proving of potassium sulphocyanate. More or less decay occurs in the human teeth in any event, because the bacteria of decay find lodgement wherever there is roughened and defective enamel, such as, for example, the crevices formed in the sulci resulting from the infolding of the enamel on occlusal surfaces between cusps.

According to the theory of Black³—wherever decay occurs elsewhere on the teeth it is because the bacteria themselves, under favorable conditions, have the ability to form small films or plaques of a gelatinoid character, which float about in the saliva until they become glued upon some accessible surface of the tooth, where they remain undisturbed for a sufficient time to allow the bacteria imbedded in them to corrode the enamel surface. This form of decay is most rapid and does much greater mischief than any other. The theory that accounts for the absence of these plaques in the saliva of individuals who have marked provings of potassium sulphocyanate, rests on the fact that potassium sulphocyanate is a powerful solvent of all gelatinous substances.

After exhaustive experiments covering a period of more than three years, the Committee on Scientific Research of the New York State Dental Society has come to the conclusion that this reasoning is correct and is recommending the following prescription to be given on alternate weeks covering indefinite

1. Read December 18, 1906, at the monthly meeting of the Eighth District Dental Society, New York.

2. "The presence of sulphocyanids in mixed saliva is considered normal by certain authors."—Sialo-Semeiology by Dr. Joseph P. Michaels, Paris, France.

3. G. V. Black, D. D. S., Dean of the North Western University, Chicago, Ill.

periods—namely, until such time as the saliva continues to show the presence of potassium sulphocyanate without the aid of medication:

R.

Potasii Sulphocyanate⁴ gr. xxxij
 Aq. Cinnamon 3 j
 Syr. Simplex qs—to make—3 iv
 Sig. Teaspoonful at bedtime.

It is believed that the quantity of potassium sulphocyanate, which will begin immediately to appear in saliva of patients to whom the above prescription is administered, is sufficient to prevent bacteria from forming the gelatinoid substance of which the plaques are made and, since without this they cannot attach themselves to smooth surfaces, the worst form of rapid decay will consequently be prevented.

52 NORTH PEARL STREET.

4. For the greater convenience of administration Parke, Davis & Co. are making a compressed tablet containing $\frac{1}{2}$ grain Potassium Sulphocyanate. 2 tablets may be taken at bedtime in place of above prescription. 1 tablet should be administered in place of 2 to children.

Report of Case of Cerebral Abscess: Operation—Death.¹

By L. W. ROSE, M. D., and ROBERT G. COOK, M. D., Rochester, N. Y.

THIS case is of interest not only because of the rarity of cerebral abscess, but also because of the rapidity of the course of the disease and the definite focal symptoms present. The patient, a man aged thirty-seven, single, an insurance agent, was first seen by the writers August 15, 1906. The history, as obtained from the patient and from his friends, shows no evidence of epilepsy or general paralysis and no recent ill health up to a few days previous. There was no history of syphilis nor of injury to the head, nor of suppurative disease of the nose or throat. On August 8th he complained of distress in the abdomen, vomited and fell twice when walking. On the 11th he had pain on the right side of the neck and in the right shoulder. On the 14th, the day previous to our first interview with him, some of his friends noticed that "he seemed different," and he had pain in the left side of the head and face.

In the evening he went to a dentist, who extracted an old root of a tooth after an injection of cocaine. The dentist noticed that he gave his card to him instead of telling him his name. The next morning, the 15th, he did not go to the office and his

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York, at Syracuse, October 16, 1906.

employer found at noon that he was confused and unable to talk properly. When seen by Dr. Rose at five in the evening he seemed slow of speech, stupid, and it was first thought that he was under the influence of some narcotic, though no definite symptoms of drug poisoning could be detected. He was unable to tell his name, he could not tell where his mother lived, but got out of bed and went to his clothes and from a memorandum read where his mother lived. His temperature was normal, his pulse was 60. His friends were told to take him out for a walk and bring him to my office at 8 o'clock that evening.

When he came to the office his symptoms had increased and he presented a more serious clinical picture. His temperature was 99.2 and Dr. Cook was asked to see him. When examined by us he could not tell his own name, the name of the company for which he worked, nor many other names, but he recognized them if spoken and could then repeat them. He could also name correctly common objects if shown to him. He could write only the first two letters of his first name and could not copy writing or printing. He could not tell the day of the week nor the day of the month nor the year. He could read aloud. He showed some confusion and was somewhat irrational about the names of succeeding days, which he could not give. He had two matches and lighted one and then tried to light a cigar with the unlighted one. He realised his aphasia and joked about not being able to remember the name of the insurance company for which he worked.

The pulse was 80, the temperature was 99.2. His tongue was coated and tremulous but was protruded straight. The pupils were equal in size and reacted to light. There was no facial paralysis nor paralysis of the arms or legs. The knee and achilles jerks were normal and there was no Kernig sign. There was a lessening of the sense of pain in both hands and the lower third of both fore arms. He was advised to go to a hospital immediately and reluctantly consented, and a room was engaged for him, but after leaving the office he absolutely refused to go to the hospital and his employer was obliged to allow him to return to his boarding house.

He was next seen by Dr. Cook about 5 o'clock the next day, August 16. The landlady reported that he had not been able to speak for several hours nor to move his right arm, and that he had passed no urine since morning and had seemed to have had pain in the head. He appeared very dull and did not speak at all. There seemed to be complete word deafness and he made no effort to protrude his tongue even when shown what to do. There was partial paralysis and loss of sense of pain in the right arm, and the right side of the face was slightly smoother than the

left. The pupils were equal and reacted to light. The pulse was 60 and the axillary temperature was 99.6. He was removed to the Rochester City Hospital in an ambulance and his mother and brother, who were in Kansas City, were telegraphed to come to Rochester.

He was admitted to the hospital at 8:45 P. M., when his pulse was 62, the rectal temperature was 101.6 and the respiration 24. He was restless the greater part of the night and seemed to have severe pain in the head. At 7:30 A. M., the 17th, P 54, T 101.6, R 22; he was given sulphate of magnesia 2 drams, saturated solution of iodide of potash 10 drops, three times a day. At 9:30 A. M., he had a general convulsion. At 12, he was dull and made no attempt to speak but smiled apparently to show recognition, and grasped our hands with his left hand to denote consciousness and recognition. The right side of the face was smoother than the left, and the right arm was paralyzed but the right leg was moved. There was no effort to protrude the tongue. There was a Kernig sign in the right leg but not on the left and there was no Babiniski reflex.

The urine was amber, acid, specific gravity 1030; no albumin, no sugar nor bile. Microscopically there were epithelial cells, calcium oxalate crystals and amorphous urates. The blood showed a leukocyte count of 14,760. The diagnosis was cerebral abscess, made by Dr. Cook and Dr. Rose.

It was learned that his mother was on her way to Rochester but could not arrive until morning. At 1 P. M., he had a second general convulsion followed by others at frequent intervals—namely, at 2:15, 3:15, 3:50, 4:10, 4:20, 6:25, 6:45, 7:15, 8, and 9. During the afternoon the patient became comatose and the rectal temperature rose to 102.6, the pulse to 150, and the respiration to 48. His business associates and friends decided that they would share the responsibility of operating with the physicians. It was 8 o'clock, Aug. 18, before all this could be arranged and though the chances seemed very small it was decided to operate, as he evidently could not live if the convulsions continued. At 9 o'clock, just before the anesthetic was given he had a convulsion which began in the right side of the face and extended to the right arm only.

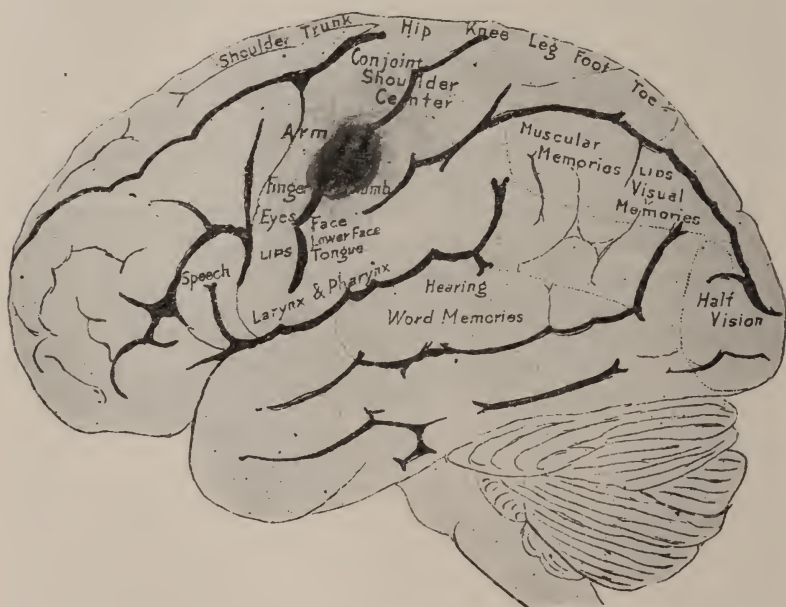
OPERATION.

Dr. Cook indicated on the shaven scalp, by the use of tincture iodine, the course of the left Rolandic fissure, and by a drill mark on the skull, the probable centre of the abscess.

The operation by Dr. Rose was a horse-shoe flap of skin and muscle to the periosteum; four openings were made through the skull by a trephine; the skull between these was divided by a Gigli saw; the trephine openings were at the angles of a

quadrilateral, three inches apart and equally distant from the central mark previously made on skull. The periosteum of basal line was left intact. When this flap of bone was turned back, there was bulging of the cerebral substance.

The dura was divided by a conical incision. In the centre of the opening there was a softened area, below the surface of the cortex which when punctured by grooved director, gave evidence of pus. This opening was enlarged and pus evacuated leaving a cavity that would admit the end of a man's thumb. This cavity was gently wiped out and drained through the posterior inferior trephine opening, and the flap of bone and skin replaced, and secured by suture line through scalp.



Rose-Cook: Cerebral Abscess,

The abscess was not circumscribed and the encephalitis involved a much larger area than was broken down. The meningitis was recent and limited to a small area over centre of abscess.

This probably accounts for the delayed and unilateral Kernig sign.

A very little ether was used to control any continuation of convulsions.

The operation did not restore consciousness and death followed in about one hour after termination of dressing.

The features of this case which seem noteworthy are, first, the unknown origin of the infection. It seemed and still seems

probable that it was due to a septic embolus from the tooth or from his decayed teeth. The dentist stated, however, that there was no pus about the tooth extracted. There was no evidence of pus infection in the nose or ear. Second, the rapid course of the disease and the extension of the focal symptoms. Third, the help to an early diagnosis afforded by the blood count in determining pus to be present and the probable cause of the focal symptoms.

SPECIAL ARTICLE—SELECTED.

A Case of Heteroplastic Ovarian Grafting, Followed by Pregnancy, and the Delivery of a Living Child, with Discussion.¹

By ROBERT T. MORRIS, M. D., New York.

Professor of Surgery in the New York Post-Graduate Medical School and Hospital;
Fellow of the New York Academy of Medicine; Member of American
Medical Association, Etc.

(*Medical Record*, May 5, 1906.)

MRS. H. W. was sent to me at the Post-Graduate Hospital by her physician, Dr. H. L. Barker of Woodside, New York, on February 1, 1902. She was 21 years of age, began menstruating at 15, and stopped menstruating at 19. Previous to the cessation of menstruation the function had been of average character. She was married at the age of 18, became pregnant soon after, and had a miscarriage at the third month. During the two years previous to her entrance into the Post-Graduate Hospital she had suffered from the common menopause symptoms of pelvic pain, headache, and hot and cold flashes. These symptoms had steadily increased in intensity, and were most marked at the times when the monthly flow should have appeared.

I made a diagnosis of cirrhotic ovaritis and asked the patient to remain in the hospital until an opportunity presented for obtaining ovarian grafts from some other patient, to replace her own ovaries, which were to be removed. A week later Mrs. W. was prepared for operation, but as I did not quite like the character of the ovaries from which grafts were to be taken, the patient was asked to wait for a better choice. On February 11, 1902, Dr. H. J. Boldt had occasion to operate upon Mrs. G. P. for uterine prolapse. Mrs. P. was 33 years of age, and the mother of three children. Her ovaries were normal excepting for the congestion common to prolapse cases. While Dr.

1. Read at a meeting of the Surgical Section of the New York Academy of Medicine, April 6, 1906.

Boldt was operating I removed from Mrs. P. ovarian tissue in the form of a wedge-shaped ribbon, not quite as much as usual in my experimental work, but enough to be incidentally beneficial in relieving the congestion for Mrs. P., at the same time that grafts were obtained for Mrs. W. The grafts were placed in physiological saline solution at a temperature of 100° Fahrenheit, and maintained at the temperature by a nurse until the abdomen of Mrs. W. had been opened through a short median incision. (It is important in dealing with delicate structures to choose the saline solution, which is isotonic with human blood).

The ovaries of Mrs. W. were removed with Tuffier's angiotribe. The reason for choosing this method is because the ligation methods are apt to be incomplete in assuring absolute removal of all ovarian tissue. When the broad blades of the angiotribe close upon the pedicle of the ovary, the ovary is crowded away from its seat and rises above the blades, thereby avoiding the possibility of leaving ovarian tissue behind. I have been particular in development of this point of technique in ovarian grafting, and in our experimental work with rabbits, my associate, Dr. L. A. di Zerega, has insisted that we must not allow even a particle of scraping from an excised ovary to fall back into the peritoneal cavity, because a single detached ovum might live in contact with the peritoneum long enough to invalidate the experiment. After removal of each ovary of Mrs. P., a slit was made through the peritoneum of the broad ligament on either side, parallel with the oviduct, and dorsad from the original seat of the ovary. Into each slit was placed a segment of ovary from Mrs. P., about one-half inch long, and one-fourth inch wide. A single catgut suture was placed in such a way as to hold each graft in place. Grafts are so placed that the cut surface of the ovary lies in contact with the cut surface of the broad ligament, in order that the nutrition of the graft may be maintained through the lymph circulation, pending the formation of new capillaries. Uncut surface of ovary is allowed to project into the free peritoneal cavity, to facilitate the free escape of ova. The uterus and oviducts of Mrs. W. were apparently normal. The ovaries removed from Mrs. W. were given to Dr. H. T. Brooks for microscopical examination, and he reported later that they were cirrhotic ovaries, distended with many small cysts, and containing no formed Graafian vesicles. Mrs. W. and Mrs. P. made customary recoveries from their operations.

Present at the operation upon Mrs. W. were Dr. H. J. Boldt of New York, and the hospital staff assistants, Dr. R. G. Treacy, now of New Haven, Conn.; Dr. W. H. Allee, now of Stamford, Conn.; and Dr. D. W. Cairns, now of New York.

On July 1, 1902, I received a letter from Dr. H. L. Barker, stating that for about a month after Mrs. W. returned from the hospital she felt well excepting for a continuance of the hot and cold flashes. On June 18, 1902, four months after the grafting, Dr. Barker wrote that Mrs. W. had at that date menstruated, menstruation lasting for five days. (Grafted patients have usually first menstruated at periods varying from two months to five months after the operation).

On March 28 of the following year (1903) Dr. Barker again wrote, stating that he had just seen Mrs. W. and obtained the following history: After the menstruation of June, 1902, she did not again menstruate until November 16 of the same year, when she flowed for one day. The next month, December 15, she flowed for four days, and menstruation after that became regular, with a flow for four or five days each period. The patient was "feeling perfectly well and happy."

Nothing more was heard from Mrs. W. until March 28 of the present year (1906) when I received a letter from Dr. Robert Lount of Hempstead, N. Y., stating that he had under his care a patient by the name of Mrs. H. W., who informed him that she was one of my ovarian grafting patients. He had on March 15, 1906, delivered her of a daughter weighing seven and one-half pounds, and mother and daughter were doing well, excepting for some manageable complications on the part of the mother. On April 4 I received a subsequent letter, stating that mother and daughter were doing well, and that the mother had a good flow of milk.

On April 14 I received a letter from Dr. H. L. Barker stating that he had examined Mrs. W. when she was about four months pregnant, but on account of her distance from his circuit of practice he had depended upon others for her care at parturition.

So far as I can judge we have in this case a well defined instance of heteroplastic ovarian grafting, followed by pregnancy, and the delivery of a normal child. If the pregnancy had appeared in one of my earlier grafting cases, when the ligature method for removal of ovaries was employed, I might have been a trifle skeptical about the nature of the case, but this pregnancy occurred after the adoption of a technique which was, to my mind, satisfactory in eliminating any weak points in our work.

Through all the varying ideas on the subject of ovarian grafting during the past few years I have felt that some one would eventually get a child out of some case of homoplastic grafting, as our experiments upon rabbits and other animals seemed to show that when the ovary of an animal was removed from the body, and then reintroduced in its original host, there was a tendency for the ovary to live, and to continue its function.

When, on the other hand, an ovary was grafted from one animal into another, the principle of intolerance of the tissues of one animal for the tissues of another animal came into play, and there was a tendency for the grafted ovary to degenerate or to become absorbed. It was noted, however, that there were various degrees of tolerance shown, and this seems to be an important point. One animal would absorb the ovaries of another animal very rapidly, while a third animal might carry the ovaries of a fourth for several months. In the case of Mrs. W. it is probable that we have an instance of tolerance for the tissues of Mrs. P. that may have amounted to complete tolerance. It is important for us to experiment along lines which will allow us to prepare animals for tolerating the tissues of each other, and I had planned to do this work, but in the midst of active practical professional work experiments go along slowly, and at the present moment I have material collected for an experiment in another field entirely, and which will demand every hour of spare time for a year at least.

At Cornell University Medical Laboratory I carried on one line of experiments, suggested by the known principles of hemolysis, with the assistance of Dr. James Ewing, Dr. George H. Ryder, and medical students, Messrs. E. D. Watkins, W. E. Drennan, and R. E. Pou. A series of rabbits were made immune to each other's serum, and their ovaries were then exchanged. These ovaries, as anticipated, were absorbed more rapidly than in animals not immune to each other's serum, but I wished simply to get the facts, in order to make use of the negative testimony.

In women I have, up to the present time, done homoplastic and heteroplastic ovarian grafting in fourteen cases, and in one case made a homoplastic graft of the fimbriated extremity of an oviduct in a case of fibronodular oviduct. The fimbriated end was fastened to the cornu of the uterus after excision of the nodular area, which included nearly all of the tube.

So far as I know there has been but one other case of conception among my grafted patients. This was in a case of homoplastic ovarian grafting, and the patient had a miscarriage at the third month. The case was not properly safeguarded for scientific report, and I have said little about it, and have not asked the profession to accept the testimony, but personally there is to my mind no reason for doubting the statements of the patient herself. I expect much of homoplastic grafting, but had about given up hope of obtaining pregnancy in heteroplastic grafting cases until we could prevent patients from absorbing the grafted ovary, and this case of the child of Mrs. W. came to me as a surprise. My efforts had turned toward perfecting methods

for homoplastic grafting, for the purpose of avoiding the precipitate menopause, retaining the influence of the internal secretion of the ovary, and the normal sexual attitude of the patient, in selected cases in which for any reason both ovaries had to be removed. There seemed also to be a fair probability that pregnancy might sometimes occur.

The present case of heteroplastic grafting renews our hope that we may make fertile some women who have reached the menopause through disease, surgical operation, or possibly after normal menopause.

It will be interesting to note which parent the child of Mrs. W. most resembles. According to Haeckel, hereditary characteristics are due to cell memory, and the cell memory of an engrafted ovary may not be changed by the influence of its new host. It is fair to say, however, that the mother who bore the child is the real mother, as she furnished the nutrition for development of the child. It is somewhat important, aside from medical and from ordinary sociological interest, to place the status of this child, for in legal circles the word "descendants" will now come to have a larger meaning.

Concerning the matter of priority in this field of ovarian grafting, according to the *Index Medicus* the proposition of the idea, the description of the technique, and the report of cases were published in New York in the year 1895. The papers of Chrobak and Knauer followed in 1896.

NOTE.—A number of physicians with whom I have discussed the ovarian grafting case, state that they are sure that the ovaries were completely removed in cases in which menstruation continued. Questioning elicits the statement that such ovaries were removed by ligation methods, and that any portion of ovary remaining must have been "outside of the ligature, where it could receive no nutrition." This is the very point that is brought out in my experimental work in homoplastic grafting. A trifle of ovary outside of the ligature may receive enough lymph circulation by peritoneal contact to insure vitality, and it then becomes a homoplastic graft. A few cases of pregnancy have been reported in cases in which the ovaries were believed to have been removed. I think that these are, in fact, homoplastic graft pregnancies, and that they offer testimony in support of the theory that such pregnancies can occur readily enough if the oviducts are in condition to allow it. It is a question if menstruation can occur without influence upon the uterine ganglia of the internal secretion of that temporary organ, the corpus luteum. The employment of Tuffier's angiotribe or of methods of complete excision of the ovary, followed by suture instead of ligation, will insure complete removal of all ovarian tissue. I

do not remember to have had menstruation follow in any case in which either one of these methods was employed, unless grafts had been placed in the patient purposely.

616 MADISON AVENUE.

DISCUSSION.

DR. C. G. CUMSTON of Boston referred to a recent article by Simon in which it was stated that microscopically two stages followed ovarian grafting. The ovary, during the first part of the time after grafting the ovary, was only nourished by the interstitial fluids of the surrounding tissues. The cortex alone retained its vitality because the fluids could not reach the central portion of the gland. The medullary zone degenerated and disappeared while a cicatricial process became established. At the end of three or four months the ovary regained its normal circulation. The various ovarian elements showed modification in their histological structure, depending upon these different nutritive phases. The interstitial cells gave evidence of changes distinctly demonstrating the influence of the nutrition of the organ, and immediately after the graft they lost their power of differentiation, their boundaries disappeared, while their cell bodies considerably diminished in size. At the end of three months, when their nutrition was again normal, they again gave evidence of functional activity, and took on the appearance characteristic of their physiological state. In view of these facts a properly performed hetero-transplantation of an ovary might result in fecundation and pregnancy. The corpus luteum seemed to him to have considerable bearing on the question of future pregnancies after grafting had been done. Enough work had been done in the study of the relationship between the ovaries and metabolism generally to show that the ovary possessed an internal secretion, and that the influence of the ovary upon the genitalia and body as a whole was due to its action and not to the presence of sympathetic ganglia in the ilium of the gland. Fraenkel had concluded that the corpus luteum was a ductless gland and provided an internal secretion which presided over the nutrition of the uterus and the imbedding of the fertilized ovum, and in the absence of the fertilization of an ovum the internal lutein secretion excited the menstrual flow. He had used the corpus luteum of a cow as a therapeutic agent in cases of threatened abortion. The lutein substance was given to stimulate the growth of the trophoblast, upon which the process of successful imbedding depended. Fraenkel was satisfied with the results obtained in fifteen cases. So strongly had the view gained acceptance on the continent that the growing trophoblast was dependent upon the corpus luteum that clinicians were endeavoring to check conception by inhibiting the growth of the trophoblast by biochemical means, an antilutein extract being used for the purpose. The lutein tissue found around atresic follicles was held to be totally different in origin to that found within the theca of

the true corpus luteum, some writers holding that the former was of connective tissue origin and the latter derived from epithelium. After extensive investigation Fraenkel decided that the "*glanda intersticiella*" was inconstant and very variable. It did not serve any important or general function in the human body. Subsequent to its rupture the corpus luteum was a hematoma lined by convolutions of lutein tissue. This tissue consisted of decidua-like cells held together by strands of connective tissue which carried vessels derived from a vascular tunic upon which the cells lay. This tunic was the theca interna; it surrounded the entire yellow body; it represented the old tunica fibrosa, but during the process of maturation of the Graafian follicle it had become highly vascularized and cellular. Internal to the lutein cells, and lying immediately upon them, was a membrane of variable thickness spoken of as the tunica propria by some and as the basal membrane by others. After discharge of the liquor folliculi and escape of the ovum the delicate new capillaries of the theca interna suffered disruption, blood escaping from them to fill the space previously occupied by the liquor folliculi. Thus a hematoma was formed, and it was in this stage that we generally met with a corpus luteum in the human ovary. He then described the process by which the corpus luteum disappeared. Islands of lutein tissue might escape destruction. In the study of lutein cysts a review of the degenerative stages of the ruptured corpus luteum had been almost barren of results. In studying the developmental processes which preceded rupture there were many difficulties. Of the sixty to eighty thousand primitive ova, only 150 to 200 were said to ripen, and it was a rare chance that provided one with a healthy human ovary. The ovum being a very delicate cell, it may suffer from preparation of the tissues for the microscope, and thus present appearances that were misleading. With regard to the origin of the lutein cell, it could be seen to arise from the connective tissue cells of the vascula theca interna outside the basal membrane of the stratum granulosum. He endeavored to show what was assumed to be a transition of the ordinary connective tissue cells into the large decidua-like cells which made up the large convolutions of the yellow body. He had worked on the assumption that the presence of lutein tissue in the theca interna of a small follicle was not of necessity a pathological phenomena, but that this tissue occurred during the healthy maturation of the follicle, and was in fact a progressive stage in its development. He was not prepared to say at what point in the development of the follicle the lutein cell was due to make its normal appearance, and in the same way at what time the granulosa normally broke up and no longer existed as a complete ring had not been demonstrated. He described lutein cysts and said that when a lutein cyst developed alongside of any other cystic space a complication cyst arose. In large islands of displaced lutein tissue lymphangiectases occurred, and

by distention of these spaces nonepithelial lutein cysts arose. The possibility of transportation of ovaries was now demonstrated beyond a doubt. According to Schultz, both in young and in almost grown animals the ovaries became attached in their new position, whether this were the peritoneal cavity of the same female, of another female, or of a male, or of the same breed, or of a female of a different breed. On other females of the same breed transplanted ovaries of mammals could give off eggs and form corpora lutea; on males of the same breed such ovaries could develop ripe eggs up to forty-two days, and show such after one hundred and seventeen days; on females of other breeds such ovaries exhibited, in the first eight days, no difference from ovaries transplanted on females of the same breed; the mode of healing and development corresponded in the animals investigated to the phenomena described by Ribbert, and in ovaries transplanted to male eggs could be demonstrated in the root, and tube-formed processes crowding from the germinal epithelium downward into the tunica albuginea. At the same time changes took place that at least stimulated the embryonic condition. The transplanted ovarian tissue appeared not to be injuriously influenced either by the blood of the male or by any secretion or other influence from the testicles, at least in the short time covered by the experiments. Transplantation did not operate to produce any unusually rapid growth in ovarian tissue, as might possibly be expected. Dr. Cumston suggested that this subject be followed up by such experiments as implantation of ovaries in a female of another breed whose ovaries had been previously removed, and that breeding experiments be then carried on with the male of the same breed.

DR. E. B. CRAGIN said that knowing Dr. Morris's care in experimental work and technique, he would be inclined to take his statements as facts simply because he said so. Still there were a number of tests to be applied to the case before accepting it, and he wished to speak on three things that Dr. Morris had laid particular stress upon, as follows: (1) The condition of the ovaries at the time of removal. It was reported that no Graafian follicles were found by the pathologist at the time of its removal, and, it seemed to him, more light should have been thrown upon this statement by the pathologist, especially regarding any developing Graafian follicles. (2) Symptoms presented at time of removal. It should be remembered that a woman might have absence of menstruation for a long period of time and yet not attain the menopause for a number of years later. There was no question but that the ovaries from a woman who was not menstruating, or who had not menstruated for seven years, might have at the time of removal a recent corpus luteum, showing that ovulation had taken place in spite of amenorrhea existing for seven years. Therefore more light upon this condition of the ovaries was needed in order to decide that the ovaries were unable or incapable of producing ova successfully. (3)

Method of removal of ovaries. He said that Dr. Morris laid stress upon the fact that the ovaries were removed by the angiotribe, but Dr. Cragin could not help feeling that possibly there was a little ovarian tissue in the stump. We did not know all that we should know regarding the anatomy of the ovarian tissues, but he believed that some of this ovarian tissue might have been left behind in spite of the use of the angiotribe. He said that a few years ago a woman came to him with an ovarian cyst on one side and a large cystic ovary on the other. Just before taking the anesthetic she said she would rather die than be made an "it." He removed both ovaries, and on examining the smaller one found that there were small portions which appeared healthy, and these he stitched in the broad ligament in the horns of the uterus. She was told that she was not an "it." She had menstruated irregularly ever since. Personally he believed that Dr. Morris's case would stand the test, and that he ought to be congratulated in contributing something to the cause of science.

DR. HENRY C. COE expressed the highest admiration for the reader's successful work. The case was so carefully reported and the technique was so admirable that there seemed to be no question as to the scientific value of the communication. However, as criticism had been invited, the speaker wished to refer to certain lacunæ which should be noted. The report of the pathologist was not as thorough as could be wished in a case of such importance, as it was not made clear as to whether the ovaries were cirrhotic as the result of previous inflammation, or had simply undergone normal atrophy. The statement with regard to the condition of the Graafian follicles was vague and unconvincing. The age of the patient, and the fact that the uterus had not undergone the usual climateric atrophy, would seem to show that the case was one of suspension of the ovarian function rather than of premature menopause. Still the fact remained that the patient had not menstruated for a long period and that there was every reason to suppose that the flow would not have returned. Whether she had ovulated or not during this time was doubtful. The speaker called attention to the well-known type of amenorrhea in young women who became unusually obese, with or without the disturbance usually attending the normal climacteric. In such cases he had known menstruation to return and to recur regularly after it had long been suspended, as the result of reduction in weight, local stimulation with electricity, etc., though he could not recall an instance in which pregnancy had followed the renewal of the ovarian function. He had had no personal experience with ovarian grafting, but had frequently noted that in conservative operations upon the ovaries, where only a small portion of an ovary had been left, without disturbance of its vascular supply, that there was a decided tendency to atrophy or to cystic degeneration, and that menstruation was often irregular or ceased entirely. As the

reporter had stated, the results after grafting had been so uncertain that there was so much the more reason to congratulate him on the brilliant result which had followed after so many previous discouragements. While the operation must have a very limited sphere, it seemed as if in this instance the highest judgment and skill had been exercised, both in the selection of a proper case and in the manner of handling it.

DR. HERMAN J. BOLDT said that while he was of the belief that it had not been established that the patient upon whom Dr. Morris operated had premature menopause, due to destruction of ovarian tissue—the pathologist's report being practically useless because no serial sections were made—the fact that there were no evidences of functioning ovarian tissue in the sections made by no means proved that there was no functioning tissue present; however that might be, the fact remained that, whether functioning or not, the ovaries were removed. Knowing of the case and seeing the operation performed, he did not think it likely that any ovarian tissue was left behind. It was most probable and most positive that the subsequent menstruation was established and caused by the ovarian tissue engrafted from one patient to the other. He said he was reminded of some cases he had had under observation, a mother and three sisters in one family, all four presenting from six months to two years between menstruations. Two of these sisters had families. This showed the possibility of not having menstruation and yet ovulation might occur. Personally he did not believe that one should sacrifice any organ apparently normal.

DR. ROBERT H. M. DAWBARN, referring to Dr. Morris's statement of future work he was to be engaged in, injecting the blood of one rabbit into the blood of another, with the idea of establishing tolerance, said that he had heard recently from Surgeon W. F. Arnold, U. S. N., who told him of a communication received from Metchnikoff's laboratory which had a direct bearing upon this work. It was found that a small amount of blood from the male animal injected beneath the abdomen of the female animal rendered her sterile, so far as that male animal was concerned. It was tried on dogs and other animals, and was found to be true in every instance. This, Dr. Dawbarn said, opened up a new field for both beneficial as well as dangerous work.

No surgical instrument is cheap unless it is made in the best way, and from the best possible material for the purpose. The way to buy instruments is to purchase them from the man who will charge least for something which he guarantees to be as good as the best in the market. There is nothing so expensive to the surgeon as knives and scissors that will not keep an edge, and locking instruments that will not stay locked after a brief period of usage.—*Medical Standard*.

CLINICAL REPORT.

Fracture of Skull with Complications.

Reported by A. M. ROOKER, M. D., Buffalo, N. Y.
House Surgeon of the German Hospital.

J. H., male; aged 37 years, while intoxicated fell at his work, injured his head and being dull and stupid as a result was brought to the hospital. Physical examination showed an abrasion on the scalp over right eye, the skin being scraped and the scalp ecchymosed. Around his right ear there was marked edema; no blood from ears, nose or mouth, nor were there any eye symptoms indicative of fracture. Temperature, 97.8; pulse 94; respiration 22. The urine, 1047 sp. gr., contained a large amount of sugar, otherwise normal.

Soon after entering the hospital he developed a well marked case of delirium tremens, running a typical course. In two days a hematoma developed under the scalp of the vertex; this was incised, the clot turned out, the bleeding vessel ligated and the wound sutured. While the scalp was open an examination was made for fracture but none detected. The unconsciousness persisted and deepened, the temperature and pulse gradually increasing until, on the seventh day when with a temperature of 105.5, pulse 144, and respiration 72, he died.

The postmortem showed an extradural bloodclot covering the entire vertex, being fully five inches in diameter and over an inch in thickness, the bleeding having taken place from both meningeal arteries which were torn by a fracture extending across the entire vertex through both internal and external plates, following the coronal suture for an inch and one half on either side of the median line, (for this reason it was not detected when scalp was incised for hematoma) and extended on either side down to, but not into the petrous portion of the temporal bone, the base being uninjured.

The case is especially interesting because of the occurrence of so extensive a clot with no visible symptoms of pressure except unconsciousness, and this could be readily explained by the delirium tremens. Then, too, the glycosuria adds another possibility; might not death have been due to diabetic coma? No history, however, was obtainable and the urine could not be watched because of incontinence with restlessness and mania.

On the death certificate, fracture of the skull was given as the cause of death. Might not delirium tremens or diabetes have been contributing causes?

SOCIETY PROCEEDINGS.

Medical Society of the County of Erie.

Reported by EDWARD CLARK, M. D., Acting Secretary,

A MEETING of the Medical Society of the County of Erie was held in the rooms of the Buffalo Society of Natural Sciences, January 14, 1907, at 8:15 p. m., Dr. A. H. Briggs presiding.

In the absence of the regular secretary, Dr. Edward Clark was appointed secretary pro tem.

Minutes of meeting held October 8th, 1906, also minutes of Council held December 19, 1906, were read and approved.

DR. ROCHESTER moved that the society proceed to elect a Second Vice-President.

DR. GROSVENOR was nominated by Dr. Rochester but he declined.

DR. W. C. KRAUSS nominated Dr. James S. Smith. As only one nomination was made, Dr. Krauss moved that the secretary cast one ballot for Dr. Smith. Dr. Grosvenor objected, and a ballot was taken with the following result: total ballots cast—8, all for Dr. Smith.

The president read a letter from Dr. W. R. Townsend stating that the Society had the right to send nine (9) delegates to the State Society, and suggested that we elect five (5) for two years and four (4) for one year.

Moved and seconded that the society proceed to elect five (5) delegates for two years and four (4) for one year. Carried.

Moved and seconded that we first elect five (5) delegates for two years. The following were nominated:

Lucien Howe, W. C. Krauss—declined, A. H. Briggs, D. W. C. Greene—declined, H. R. Hopkins—declined, A. G. Bennett, A. L. Benedict, F. E. Fronczak, A. T. Lytle.

Nominations were declared closed and ballots taken with the result that the following were elected delegates for two years:

A. H. Briggs, A. L. Benedict, F. E. Fronczak, Lucien Howe, A. G. Bennett.

Nominations for one year:

G. L. Brown, W. M. Ward, A. T. Lytle, J. D. Macpherson.

Nominations were closed, ballots taken and the following were elected as delegates for one year:

J. D. Macpherson, G. L. Brown, A. T. Lytle, W. M. Ward.

DR. A. T. LYTLE, from committee on membership, reported the following applications for membership:

H. P. Frost, transferred from Seneca County Medical Association, of which society he was in good standing; Franklin W.

Barrows, E. A. Hatch, Guerdon Potter, Louis Hengerer, Thos. J. G. Sheehan, Lawrence Hendee, F. A. Mendlein.

The committee on membership reported having received, from applicants, amounts as follows: H. P. Frost, \$4.00; Franklin W. Barrows, \$4.00; E. A. Hatch, \$5.00; Guerdon Potter, \$5.00; Louis Hengerer, \$5.00; Thos. J. G. Sheehan, \$5.00; Lawrence Hendee, \$5.00; F. A. Mendlein, \$5.00.

Moved and seconded that the chairman cast the ballot of the society for the persons named, which was unanimously carried, and they were declared duly elected.

The committee on status of members, through Dr. C. A. Wall, reported as follows:

"A number of questions were referred to us.

1st. Status of members of the Association not members of the Society.

Under the articles of agreement presented at a previous regular meeting and adopted January 9, 1906, all members of the Erie County Medical Association not members of the County Society were elected to membership and placed on roll of members by unanimous vote taken on acceptance of the rules of the State Society. They are members in good standing, and no further action is necessary.

2d. Members of Association but also members of the County Society but not in good standing in Society at time of amalgamation. Only eight such, of whom three have paid their dues for 1906, and one is now out of the State. A precedent has been established last year, and we advise that the same be done by all: that their back dues be remitted by action of the Society.

3d. Status of all members of the Society as to dues—

Some names of past members now dead are on our rolls, and many members are in arrears, and some names are on the rolls who have never completed their membership, and your committee did not think it advisable, at the present time, to undertake any revision, but wish to report progress and suggest that the treasurer be empowered to employ a collector to see all who are in arrears, at an expense not to exceed twenty-five percent. from the county dues he may collect."

Moved and seconded that the report be received. Carried.

DR. GROSVENOR moved that we consider the report seriatim—seconded and carried.

DR. LYTLE moved, and it was seconded, that the dues of Dr. Bennett be refunded.

DR. HOWE moved, as an amendment, that the dues of all whose names were read by Dr. Wall as in arrears, be refunded. Carried.

DR. WALL stated that a very large number of members of the old Erie County Medical Society were in arrears for dues and moved that the treasurer of the society be empowered to collect the same at an expense not to exceed 25 percent. of money collected as county society dues.

DR. HOPKINS stated that as this was a time of "Peace on Earth and Good Will to Men" he moved, as an amendment, that the back dues of all members of the society be remitted up to January 1, 1906. Vote taken and amendment lost.

Vote on original motion, namely—recommendation of committee, as moved by Dr. Wall, was then carried.

DR. WALL stated that there were about two hundred and fifty members of the County Society in good standing.

DR. ROCHESTER moved that we do now proceed to elect ten (10) delegates to the Eighth District Branch of the State Society. Carried.

DR. KRAUSS moved that a ballot be taken for ten delegates—five for two years and five for one year. Carried.

Nominations as follows for two years:

O'Gorman, Mendlein, Krauss, Schroeter, Callanan, W. H. Thornton, E. E. Koehler, Grosvenor.

Ballots were taken with the following result:

Drs. Krauss, Grosvenor, Mendlein, Schroeter, and Ernest Wende, who were declared duly elected as delegates to the District Branch for a term of two years.

On motion, the following were elected, by ballot, as delegates to the District Branch for a term of one year:

Drs. Callanan, O'Gorman, W. H. Thornton, Taylor and Morrison.

DR. HOPKINS, from the Board of Censors, presented the following report which, on motion, was received and placed on file:

To the President of the Medical Society of the County of Erie.

Your Censors would respectfully report that it is with distinct satisfaction that we review briefly some of the more prominent events in the work of the censors during the three years last past. This review is for the purpose of making the fact prominent that unusual success has attended our efforts, in directing the attention of those in authority to some of the more notorious medical criminals of our city. In one year the attention of the Criminal Courts was directed to the practice of one Anton J. Weickers, the abundantly advertised boy wonder, and upon trial the so-called boy wonder was sentenced to and did time in the Erie County Penitentiary. The following year the Criminal Courts took notice of the organization and practice of the Vincure Remedy Company, of its aims, its aspirations and its methods, and after trial its Superintendent, one I. A. Finch,

so-called doctor, transferred his work from the field made quite large by advertising to the more limited but harmless one of work in the penitentiary.

In the same year the attention of the Department of Education of the State of New York was directed to the business methods of an unlawful corporation, the Atlantic School of Osteopathy, located at the corner of Main and Riley Streets, Buffalo, a short block from the location of the Vincure Remedy Company, Main and Utica Streets, with the result that the Atlantic School of Osteopathy ceased from its unlawful work, the teaching of manual therapeutics and the graduation of persons with diplomas authorizing them to practice medicine under the guise of practicing osteopathy. The number of fraudulent diplomas issued by this Atlantic School of Osteopathy runs well up into the hundreds and your censors are advised by counsel that any of the holders of these diplomas living in this State are liable to arrest.

It was considered by your censors to be a distinct and laudable achievement, to enlist in behalf of the public health, the protective efforts of the District Attorney's Office, of the Criminal Courts, and of the Department of Education of the State, all in a given year, and there were those of our friends who ventured to declare that the year 1905 would ever stand as the year of high record, that in 1905 the censors' clock had struck twelve, and that no subsequent year could make as favorable a showing. Events, however, did not seem to confirm the prophecy and it is the conviction of the censors that the work of the year 1906 in immediate results and in far and wide-reaching future potentiality far exceeds in importance the work of any previous year.

For some time our attention had been directed to the interest and activity of the American Government in its relation to the use of the mails for fraudulent purposes, and we had noted with extreme satisfaction that our national authorities emphatically declined to be used to promote the interests of the advertising medical criminals, declined to share with the more venal of the public press the responsibility and the profits of these criminals, and that the authorities at Washington could be brought into action in the form of fraud orders against certain medical correspondence, and advertisements in the shape of circulars, letters and newspaper notices, forbidding to such the use of the mails. This attitude of our Government gave encouragement and offered help, as the advertising criminals of our city demanded for their detection and suppression powers greater than those of the District Attorney's Office or of the Criminal Courts, or even of the powerful Department of Education of the State of New York.

The scandal of the advertisements of our criminal abortionists had been growing year by year and had become wellnigh intolerable. Our counsel brought this matter to the attention of those in authority at Washington and invoked their aid. An

officer representing the Post Office Department was sent here and assigned to the work. The work of this officer covered a period of several months and your censors were able to give him some assistance. His work was performed with effective originality and thoroughness and resulted in demonstrating that our medical criminal class included a group of advertising abortionists large in number, amply equipped, hungry for their victims, brazen with the courage of their depravity. Abundant and convincing evidence to this effect was taken to Washington and there given the consideration its nature and importance richly deserved, with the result that the Buffalo Express of September 25, 1906, contained the following, probably the most startling and important bit of medical criminal news of many years: "By order of the acting Postmaster General, dated September 8, made upon evidence satisfactory to him that the same are unlawful advertisements giving information where abortifacients and criminal operations will be performed, you are directed to refuse to accept for mailing newspapers or other publications containing the following advertisements: Dr. Turver, alias Prospect Avenue Maternity Hospital, No. 101 Niagara St.; Dr. W. A. Crandall, No. 139 S. Division St.; Dr. Linn, No. 10 Broadway; Dr. Wade, No. 485 Main St., alias Medical Home; Dr. Munroe Manges, alias nurse, Box No. 926, Medical Home, No. 777 Washington St.; Dr. Rowe, No. 60 Niagara St.; Dr. Guy Crandall, No. 9 W. Mohawk St.; Dr. Spencer, No. 14 E. Eagle St.; Dr. Ince, No. 66 W. Chippewa St., and by the same order you are further directed to refuse to deliver and treat as fictitious mail received by your office for the following false, assumed, and fictitious addresses used in connection with the above unlawful businesses, Prospect Avenue Maternity Hospital, No. 101 Niagara St.; Woman's Medical Home, No. 485 Main St.; Dr. C. J. Wade, or Dr. Wade, No. 485 Main St.; Nurse, Box No. 926; Medical Home, No. 777 Washington Street. You will advise the newspapers of Buffalo that future issues of their newspapers carrying these advertisements will be refused admittance to the mails. In accordance with the provisions of the Postal Laws and regulations you will close all boxes rented by any of these parties." These orders were signed by R. P. Goodwin, Assistant Attorney General for the Post Office Department.

This was followed in the Buffalo Express of September 28, 1906, by the following: "A second fraud order was received at the local Post Office against two more local concerns and was put in force yesterday. The order from the Attorney General in Washington bars from the mail any newspaper carrying advertisements of the Dr. Hewlin Company, No. 485 Main Street, and of Mrs. Park. The order reads as follows: "By direction of the acting Postmaster General you will refuse to accept for mailing papers or other publications containing the advertisements of Mrs. Park and of the Dr. Hewlin Company. You are further directed to refuse to deliver mail to the fictitious ad-

dresses, Dr. Hewlin Company and Dr. Hewlin. You will also vacate any postoffice boxes rented by any of these parties. These instructions are additional to those given recently in connection with the other Buffalo abortion offices. Signed by the Assistant Attorney General, as in the former order.

This wholesale suppression of medical criminals we believe is without parallel in the annals of our state. Everlasting gratitude is due from every decent man and woman of this city to those in authority at Washington for this unspeakable relief, this invaluable succor. Your censors are of the opinion that the present situation is favorable for testing the working of our machinery as prepared by law for revoking license to practise medicine and surgery in this State. The thought that the State of New York should license a criminal abortionist, or that an advertising criminal abortionist should continue to prosecute his despicable trade under cover of a license from the State of New York to practise medicine and surgery, is nauseating. The Department of Education has authority to revoke the license to practise medicine when such recommendation shall be made by the board of medical examiners. Your censors urge this matter upon your attention in the hope that it may receive your most thorough consideration, to the end that such instructions as to you may seem expedient under the circumstances may be given to your next Board of Censors.

With distinct reluctance and regret, with feelings akin to shame and confusion, we invite your attention to a phase of our work, to the experience not of one but of many years, to indications which seem to show that loyalty to principles of truth and morality does not abound in all of the members of our profession and does not even seem to be conspicuous in all the members of this society. Again and again it has been our experience that complaint would reach the censors from a member of our society, from one of the laity, or from the police, and the case would be investigated to the end of establishing the fact that the accused was guilty for instance, of the practice of medicine without a license, the same being a crime of misdemeanor, or of falsely personating another practitioner of a like or a different name the crime of felony, or of attempting criminal abortion, or of performing criminal abortion, or the crime of manslaughter, or the virtual crime of murder, and yet the censors would find that the accused person and his crimes was under the support and protection of members of this society in good standing; that this support and protection would appear in different forms, frequently in the shape of letters vouching for his good moral character, or testimony and argument before the Jury, letters and testimony given without any knowledge of the facts and without the least attempt to learn by inquiry from the censors as to the plain and pertinent facts. The work of the censors again and again has been hindered and obstructed by this disloyal and traitorous interference with the official duty of the

officers of your society. For years this needless burden has been suffered in silence. It is now, however, the conviction of the censors that forbearance has ceased to be a virtue, that the time has come for plain speech. Names of the members of the society who have been perniciously active in protecting medical criminals, in opposing the work of the censors are not presented at this time. It would seem that the question could be more intelligently and more efficiently considered in the abstract free from the personalities and possible acrimony almost inevitable if the individual members were mentioned. The censors believe, however, that the time has come for this society to give emphatic expression to its convictions as to the importance of certain fundamental truths: that it is before all else desirable that the profession of medicine should include only persons of good moral character; that the habitual perpetration of crimes or criminal acts is a conclusive demonstration that the perpetrator is not possessed of such moral character; that the responsibility of enforcing the provisions of the Penal Code and of the Public Health Law rests upon every member of this society as also it rests upon the Board of Censors; that this Society has the power and the authority to discipline its members; and that this society here and now pledges its full powers in support of any and all of its officers while lawfully engaged in the performance of official duty.

In conclusion we report with regret the receipt of the resignation of our counsel, John Lord O'Brian. This resignation herewith submitted bearing date of December 31, 1906, severs official relations of many years. During all these years Mr. O'Brian has given of his time and his knowledge of medical law to the censors and other officers of your society without stint or limit. The censors bear willing testimony that Mr. O'Brian's services have been of the utmost importance and value, and that whatever of success in doing their official duty has been achieved is in large measure due to the singular devotion, to the high ideals of the purposes of medical law, and the functions of medical societies, of our counsel John Lord O'Brian.

Recognition should also be made of valuable services courteously given by the police through their efficient officers, Superintendent Regan and Captain Collins. Without the sympathy and assistance of the police, much of our work would have been impossible.

Finally we desire to thank our upright and able District Attorney Abbott and Assistant District Attorney Murphy. Their efforts in behalf of decent living have been constant and invaluable.

Respectfully submitted,

H. R. HOPKINS
JOHN H. GRANT
FRANCIS E. FRONEZAK
IRVING W. POTTER
DELANCEY ROCHESTER

DR. ROCHESTER made the following motion:

"Resolved, that it is the sense of this meeting that no member of this society should give certificate of good moral character or letter of recommendation to any individual practising medicine or intending to practise medicine, excepting after careful investigation of all the circumstances in each individual case."

Motion was adopted.

DR. ROCHESTER also offered the following motion which was adopted:

"That the society directs the Board of Censors to call the attention of the Medical Examiners of the State of New York to the moral status of W. W. Turver, that Examiners may recommend to the Board of Regents a revocation of his license."

DR. HOPKINS nominated Dr. Ernest Wende for Chairman of Public Health Committee.

DR. HOPKINS nominated, but declined. Nominations closed.

Ballot was taken and Dr. Wende was declared duly elected.

DR. W. C. CALLANAN moved that report of Board of Censors be published in the Daily Press.

DR. GROSVENOR moved, as an amendment, that such portions be published as may be thought advisable by the Chairman, Dr. Hopkins. Amendment carried.

DR. JOHN D. MACPHERSON, the last president of the society, then read his Annual Address which was omitted last year, for want of time.

DR. HOPKINS moved a vote of thanks to ex-president Macpherson. Carried.

It was moved and carried that the address be published in full in the Buffalo Medical Journal.

DR. DEWITT C. GREENE, Treasurer, submitted the following report which, on motion, was referred to an auditing committee composed of the following, named by the Chair: Drs. Grosvenor, Rochester, and Brown.

DR. HOPKINS wanted to know what we received from the State Society for the dues (\$500) which we paid last year. He was told that we received the Journal, the Directory, and mal-practice defense.

DR. WALL asked unanimous consent that the By-laws be suspended so that the Treasurer can send out all bills to members for 1907 for \$5.00 instead of \$6.00. Carried.

On motion, the Council was instructed to fill all vacancies occurring in list of delegates.

DR. HOPKINS moved that resignation of H. C. Leonhardt be accepted and his dues remitted. Dr. Grosvenor moved to lay it on table. Lost. Original motion of Dr. Hopkins was carried.

DR. H. H. BINGHAM sent the following letter to the Society:
 "I wish you would stop sending me these communications. I am not a member of the Erie Co., Medical Society, for I resigned long ago, and have not been to one of its meetings in years. I do not consider that there is any power that can force one to belong to an organization that he does not wish to continue a member of; and I do not propose to be forced into membership. So please stop this dunning."

DR. HOPKINS moved that the Bingham matter be referred to the Board of Censors with instructions to collect his dues under the law. Carried.

A letter from Dr. Pohlman read by the treasurer was, on motion, placed on file.

DR. GROSVENOR moved that a vote of thanks be extended to the Board of Censors for their excellent report.

Meeting adjourned.

ANNUAL REPORT OF COUNSEL.

To the Medical Society of the County of Erie.

GENTLEMEN: In accordance with my custom I herewith present the following detailed report of work performed and services rendered by me as counsel since the filing of my last annual report.

So far as the suppression of medical criminals is concerned, it is safe to say that more has been accomplished during the past year than ever before in the history of the society, and it is believed that the statistics below quoted amply support this assertion. The general effect of this work upon the morality and standards of the community must necessarily be considerable and important.

1. OSTEOPATHY.—During the winter of 1906, your counsel carried on an active correspondence with various people with the object of opposing as strongly as possible the passage of the proposed osteopathic measures at Albany. On the 28th of February a delegation from your society, accompanied by your counsel, appeared at Albany before the Joint Legislative committee in opposition to the then pending measure suggested for the regulation of osteopathy. Both Dr. Hopkins and your counsel addressed the Committee upon the subject. A little later, a formal statement of your position and general criticism of the pending measure was drawn up, printed and forwarded to every member of the state legislature, a large portion of the matter therein embraced being furnished by your counsel. In connection with this work your counsel attended several conferences of those interested and furnished those in authority with a considerable amount of data relating to the subject.

2. PARKS CASE.—Early in June your Chairman called attention of counsel to an advertisement signed by a Mrs. Parks relating to a so-called maternity home. A brief investigation

satisfied us that this was a fake institution run by a pair of medical criminals. After further investigation and several conferences with the District Attorney, the house was raided by the police and the criminal caught red-handed in the act of performing a criminal operation. The man was immediately indicted, his woman partner being allowed by the police to go free. Later on the defendant was permitted to go at large upon \$1500.00 bail given by one man. In the judgment of your counsel both the bail and the precautions taken by the District Attorney to investigate the same were inadequate. The couple attempted to resume their nefarious business. A further investigation was made by the society with the idea of further prosecution, but the pair immediately fled the city and have not since been located by the police or District Attorney.

3. WOLINSKA CASE.—At the date of my last annual report this case was incomplete. The woman was brought to trial in July with the result of acquittal. She was a Polish midwife charged with the illegal practice of medicine in that she used a scissors to cut the ligaments in the mouth of a tongue-tied child, with the result that the child died. The case against her was thought to be conclusive, but a considerable number of Polish witnesses were sworn by both sides, with the result above stated.

4. BY LAWS.—In the month of June your counsel was called upon by several members of your society, including Dr. Stockton and Dr. Hopkins, for a formal opinion as to the legality of the new by-laws of the state society, and upon July 12th a formal, lengthy opinion was rendered dealing with this whole subject. In October your counsel furnished a similar opinion in accordance with your request made through Dr. Gram, the secretary, the latter opinion dealing specifically with the proposed new by-laws of the county society. At the request of Mr. James Taylor Lewis, counsel for the state society, your counsel afterward conferred with that gentleman relating to the subject matter and also attended a conference held at the request of Mr. Lewis with several members of your society.

5. POST OFFICE CASES.—Early in the summer your Chairman, Counsel and the Post Office Department reached an understanding for a joint prosecution of all medical criminals in this vicinity who made use of the mails. The work was carried on for a period of time covering several months and involved considerable labor, counsel and advice. As a result of the joint effort so made the Post Office Department early in September, 1906, issued an order denying the use of the mails to the following persons and institutions:

Dr. Rowe,

Dr. Hugh Linn,

Nurse, (the advertising alias of Dr. Monroe Manges)

Dr. Monroe Manges,

Medical Home, (run by a woman named Pyburn for the convenience of several irregular practitioners),

Dr. Cynthia J. Wade, (dead, but whose diploma was in Stevens's hands),

The Hewlin Medical Company,

Mrs. Parks Maternity Home,

Dr. Guy Crandall,

Dr. Ince,

Dr. Spencer,

Dr. W. A. Crandall,

Dr. Turver, alias Prospect Avenue Maternity Hospital,

Dr. Hewlin,

Doctor Hewlin Company,

As a result of this order the parties involved were at once denied the use of the mails and so far as your counsel is aware, none of them has since recovered his right, except Dr. Rowe, who was aided by several prominent local physicians. It is impossible to overstate the effect of this stroke upon the irregular practitioners of the community. Practically all who had been under suspicion and who were not mentioned by name in the fraud order gave up the work. Dr. E. D. Stevens, for instance, who was connected with various irregular institutions, abandoned them and it is understood that he intends to leave the city. The thanks of the society are due to Mr. H. K. Cochrane, the very efficient Inspector of the Post Office Department, whose remarkable diligence and skill made this work successful.

In justice to your officers who did this difficult work, it should be stated that in no case mentioned was the criminal punished by this order on the evidence of less than two witnesses. Practically all of those mentioned were implicated in agreeing to perform abortions. In addition to this, some of the physicians who advertised urinary analysis were charged by the Post Office Department with having furnished false and absurd analyses, finding traces of venereal disease in cold tea and in crystal water.

It is hoped that this wholesale exposure will make less prevalent for a time at least, this horrible business of deliberately slaying by the wholesale unborn children. In this connection your counsel respectfully calls your attention to the fact that a number of members of your society, notwithstanding this fraud order, have written letters of good moral character for several of the irregular practitioners included in the fraud order. They have done this without thoroughly investigating the facts involved and without any conference with or notice to those of your officers who have been engaged in the work of suppressing crime, and their action has been a source of embarrassment to us. It is respectfully submitted that this practice should be stopped. The question is not one of courtesy, but of principle and decency.

6. TURVER CASE.—For several years your Board has been receiving complaints against Dr. W. W. Turver, but no evidence was ever furnished strong enough to warrant prosecution until the time that the above mentioned drag net investigation was in-

stituted. In the course of that investigation evidence came into the hands of your counsel and Mr. Cochrane which was at once laid before the District Attorney and the police officials, with the result that after a somewhat sensational series of events, Turver was indicted and charged with criminal operation upon one Gertrude Knight. A trial afterwards had resulted in a disagreement by the jury. It is expected that the case will soon again be brought to trial.¹

7. MULLEN CASE.—In the month of September the Health Department referred to us the case of a Mrs. Minnie Mullen, charged with having performed criminal operation on a young woman who died shortly thereafter. The woman was at once arrested and indicted for manslaughter. After her arrest a second case was reported to your board and under its direction a careful investigation of the facts was made. In the second case also the patient died. Mrs. Mullen was at once re-arrested and again indicted for the same crime. At present she is at large on bail awaiting trial. Your counsel believes that in her case the evidence of guilt is strong and conclusive.

In addition to the foregoing cases, your board has made a further investigation involving about a dozen persons and institutions suspected of irregular practice. These investigations have not been entirely completed; your officers are still at work upon them and it would be inadvisable to give the particulars thereof at this time, but it may be reasonably stated that further results and prosecutions will follow the conclusion of this work.

During the year many less important questions have arisen and have been attended to by your board and counsel, and some investigations of a minor character have been made. In some of these cases the matters complained of did not require prosecution; in other cases the evidence obtained was insufficient. There have been few days during the entire year when some work has not been done by members of your board and counsel.

In conclusion your counsel respectfully calls attention to the recommendation which he made last year, namely, that some immediate steps should be taken either by means of state legislation, or local ordinance to restrict and regulate so-called medical institutes which are in the main organizations operated by fakirs conducting irregular and irresponsible business, and by their advertisements and practices doing great harm to the welfare of the community. Your counsel desires to express to the members of the society and in particular to the Board of Censors his thanks for their general attitude in regard to the counsel and advice given by him during the past year.

Respectfully submitted,

JOHN LORD O'BRIAN.

Dated, Buffalo, N. Y.,
December 31, 1906.

1. A second trial resulted in conviction.

PROGRESS IN MEDICAL SCIENCE.

Obstetrics.

By E. S. McKEE, M. D., Cincinnati.

Lecturer on Clinical Gynecology, Medical College of Ohio—University of Cincinnati.

DEATH DURING PREGNANCY; UNDETECTED CANCER OF KIDNEY.

G AULTIER (*Ann. de Gyn. et d'Obstet.*) reports that a needlewoman aged 35, in the seventh month of her third pregnancy, gained admission into a hospital on account of distressing fits of coughing which had lasted for two or three months. The symptoms simulated whooping cough. The sputum was tenacious and frothy, sometimes streaked with blood, and at others contained gelatinous masses of blood pigment. Tuberculous disease of the bronchial glands was diagnosticated. The urine was absolutely normal, and Gaultier notes that the patient never said a word about lumbar pains, so frequent in pregnant women. There was no abdominal tumor. The patient died during a very violent fit of coughing. The right lung and pleura were infected with cancerous deposit; the tracheo-bronchial glands were infected, the largest compressing the right bronchus and pneumogastric. The primary seat of cancer was found to be the right kidney, enlarged to the size of a hen's egg, the pelvis and renal vein being invaded. The fetus showed high congestion of the kidney and suprarenal capsule, with numerous hemorrhagic foci.

PAINLESS LABOR.

LAMPHEAR (*Medical Record*) gives the following description of his method: When labor has progressed to the stage in which the os uteri is well dilated and the pains are becoming distressingly severe, a hypodermic injection of one quarter of a grain of morphine and one hundredth of a grain of hydrobromate of hyoscine may be given; in one hour the forceps may be applied and labor completed without any pain whatever, even though the perineum be lacerated and sewed up. There need be no hurry; the perfect analgesia will last for hours. If the patient is not asleep at the end of an hour after the injection, a few drops of chloroform may be given by inhalation, a dram at most usually putting the patient to sleep of some hours' duration. There will be none of the nausea of a prolonged ether or chloroform narcosis, no increased danger of hemorrhage as after chloroform, and no necessity for a skilled assistant to give the anesthetic.

CRIMINAL ABORTION AND ILLEGITIMACY.

CARSTENS (*Medical Record*) finds home education and the development of self control in the young to be the remedy for il-

legitimacy. He says that if mothers would explain to their daughters the physiological process of reproduction there would be very little illegitimacy. As to the crime of abortion he thinks religious teaching very weak, and this failing we should impress upon the mind the great immediate danger and the chronic invalidism that follows in many cases. We should also help the unfortunate unmarried by showing them how to legitimately avoid exposure. There is, however, a deep seated reason, and that is, he thinks, the tendency to late marriage and to the correction of this as well as to home training, must we look for the cure of the evils of illegitimacy and abortion.

ECTOPIC GESTATION OCCURRING TWICE IN THE SAME PATIENT.

ROWSE (*Lancet*) reports a case in which, in both instances, the uterus was retroverted. The patient was a II-para in which the usual symptoms appeared toward the end of the second month. Abdominal incision showed rupture of the right tube with a pint of blood between the two layers of the broad ligament. This was evacuated by the extraperitoneal method. The ovary and tube were not removed. A similar experience happened nine years later, no intervening pregnancy having occurred. At this time behind and to the left of the uterus was a large adventitious sac containing the ovum and about a quart of blood. The clot and ovum were removed with the tube and ovary on that side. Patient recovered.

DOUBLE OVARIOTOMY—PREVENTION OF BAD RESULTS.

ZACHARIAS, (*Centrallblatt fuer Gynkologie*) when both ovaries are removed for benign cysts or tumors or inflammatory conditions advises that a piece of the cortex of the less involved ovary be separated from the growth removed and left in connection with the hilus. This piece should be about one millimeter thick and twenty-five to fifty millimeters in diameter, should be drawn together with fine catgut into a mass or cylinder attached to the broad ligament. Even this small portion of ovarian substance is sufficient to prevent the bad psychical and physical effects which so often follow complete castration.

SUDDEN DEATH AFTER LABOR.

MCDANIEL (*Medical World*) reports a case of mysterious death after labor. The etiology was obscure. Meigs originated the theory that a partial detachment of the placenta during labor

with weakness of the heart leads to the formation of large soft clots in the uterine sinuses, which may become detached by a subsequent powerful uterine contraction and emboli lodge in the heart and pulmonary artery. The entrance of air in the circulation through the uterine sinuses has not received recent confirmation as a cause of sudden death. Shock, it seems, may be the cause of death after labor as after any surgical operation, but its occurrence is doubted by Williams. Lusk, about twenty years ago (*Journal A. M. A.*) wrote a fine article on this subject and collated reported cases. Rupture of the genital tract may give rise to slight symptoms at the time, yet end in death from subsequent hemorrhage. In all cases of sudden death a very accurate knowledge of the woman's previous condition is necessary. Women may suffer from chronic heart disease, aneurism, pancreatitis, etc., which may terminate fatally during or immediately after labor.

PUERPERAL STRANGULATION OF THE SPLEEN.

PROF. BARSANY, of Vienna, reports a case in a primipara, aged 26, which showed symptoms of peritonitis owing to torsion of the pedicle of a wandering spleen. On admission she had a high temperature and 17,000 leukocytes, so that a tentative diagnosis of suppurative ovarian cyst was made. Some weeks later, after subsidence of the fever, Barsany opened the abdomen. Fifteen liters of pus were evacuated from an enormous cystic swelling, while near the lumbar vertebræ was found the necrotic spleen with its twisted pedicle. The organ was extirpated and the abscess cavity flushed and drained, after its wall had been sutured to the abdominal wall. It was supposed that the spleen became freely movable after an attack of malaria, and that its pedicle became twisted in the course of the pregnancy, producing hemorrhage into its capsule, which was followed by an infection from the intestine that gave rise to the enormous abscess, although the condition might have been pyemic in its origin.

LABOR OBSTRUCTED BY UNRUPTURED HYMEN.

THE following case, which came under my care some time ago in North London, is worth recording. With an experience of over 3,000 labors during the last twenty-three years, this is the only example of the kind I have met, though similar instances are mentioned in obstetrical works. The patient was a young woman who had been married about a year. When summoned to attend, labor had progressed for many hours, for the fetal

head was well down on the perineum. The hymen was firm, rigid, and unyielding, and would not admit even the little finger. As this condition was obstructing labor, I made several incisions into the hard, fibrous material, after which delivery proceeded naturally. The perineum was slightly lacerated, but this was purposely left unsutured. The presentation was normal; no complications followed, and the mother subsequently did well.—Edwin Cahill, in *British Med. Jour.*

AN UNUSUAL CASE OF ECTOPIC GESTATION.

CANDLER (*Charlotte Med. Journal*) made a diagnosis of ectopic pregnancy with rupture of the sac into the peritoneal cavity. Owing to the extreme shock from which the patient was suffering the laparotomy was postponed till the next morning. Opiates controlled the pain for a few hours when it returned with all its severity. At 4 A. M. the pains became more violent and cramp-like in character with very little time between them. At this time she acted more like a woman in the last efforts to expel a fetal head through the perineum. There was a sudden cessation of the bearing down pains as if she had succeeded in her task; at the same time there came a gush of liquid, not from the vagina, but from the rectum. What resembled amniotic fluid, shreds of membrane and clots of blood were passed as well. In the course of an hour she again passed about the same quantity of fluid in which was found unmistakable portions of placenta, together with the remains of what was taken for a six weeks fetus. Sanguinous fluid was passed from the rectum for ten days when it ceased and the patient is now enjoying excellent health.

CESAREAN SECTION PERFORMED BY A COW.

W. B. MORSE, Salem, Oregon, (*Journ. A. M. A.*) reports Mrs. W. E., aged 31, pregnant at full term with her third child, and standing in the road about 60 feet from the house, watching her husband unload hay from a wagon. A vicious two-year-old heifer charged her and inserted a very sharp horn into the abdomen near the anterior superior spinous process of the ilium. It penetrated the abdominal wall, uterus and membranes, but escaped the child. The point of the horn then emerged again just to one side and below the umbilicus. The result was two transverse rents, the upper one about 5 inches long and the other clear across the abdomen. The child was delivered through the larger opening and fell to the road, where it was picked up by the father. I made an eight-mile trip and arrived about 20

minutes after the mother's death from hemorrhage. The uterus was outside the body, torn clear across and inverted, with after-birth and membranes still attached. The child is still alive and doing well. I have found histories of several similar cases in Gould and Pyle's work on medical curiosities.

THE ETIOLOGY OF ECLAMPSIA.

WEICHARDT AND PILTZ (*Deutsch Med Woch.*) say that a study of the mechanism of the production of hay fever and eclampsia leads to the conclusion that each disease is the result of the formation of specific poisons from albumins, in the one case derived from the placental albumin, and in the other from the albumin of the pollen. Weichardt believes that eclampsia is the result of the formation in the body of toxic substances resulting from the cytolysis of placental cells that enter the circulation, it being assumed that in these cases there is a deficiency of anti-toxins or inhibiting bodies. The authors speak of their efforts to produce an artificial inhibitory body to be used as a prophylactic, in which they have been partially successful, though it does not appear that there is any immediate possibility of its being practically useful.

ABORTION FOLLOWING THE USE OF DIACHYLON.

HOPE ROBESON (*British Medical Journal*) reports the case of a woman who on the advice of a neighbor took pills of diachylon for amenorrhea due to physiological causes. After taking them two weeks she had a miscarriage. Then five months later she had another abortion at two months. The menses had been regular during the second pregnancy and she was not aware that she was pregnant. The typical blue line on the gums was still quite visible.

INJURIES TO THE CHILD'S HEAD DURING LABOR.

SACHS (*Journ. Am. Med. Ass'n.*) warns the obstetrician that, other things being equal and, above all, the life of the mother not being in danger, it is wise to curtail the period of labor as much as possible, and not necessarily to wait until the child's heart action becomes feeble. Many children might have escaped epilepsy, idiocy, and paralysis if the period of labor had been properly managed. He is firmly convinced that protracted labor is the most powerful factor in producing epilepsy, idiocy, or paralysis in the newborn; one or often all of them are developed

and may be due to conditions present at the time of birth. He further says that the medical men in attendance at confinements have for years followed a policy of indifference toward the welfare of the child, and have allowed too many children to be born into the world after labor unnecessarily prolonged, and in conditions that are a distinct disadvantage to society and to the individuals for the entire period of their natural lives.

A NEW MANAGEMENT OF OCCIPITO-POSTERIOR POSITIONS OF THE FETAL HEAD.

O'BRIEN (*Medical Record*) introduces either hand under the occiput, with or without anesthesia, grasps it firmly, having separated the middle and ring fingers to steady the neck, making counter pressure upon the fundus, thus bringing the fetal body and head into one solid mass. With assistance he slowly rotates the mother to the genupectoral posture. This manipulation brings the occiput to the anterior position without traumatism to the mother or child. Labor proceeds as when the patient is placed in the genupectoral position for prolapsed cord, or in the lateral obstetrical posture of the English school. The writer calls attention to the awkward movement which occurs when the patient's knee passes over the accoucheur, for the crux of the manipulation is to keep the head fixed steadily with the body curled upon it.

DRESSING OF WOUNDS.

Miles F. Porter (*American Medicine*, September, 1906) says that unwise efforts to produce asepsis may cause more harm than the bacteria against which they are directed. The surgeon's attitude toward nature should be that of a modest cup-bearer, not that of a usurper. Sutures, redressings, and drains are, at best, necessary surgical evils, hence all sutures should be discarded in favor of the bandage and adhesive plaster when these can be made to serve the same purpose; but when the use of sutures is imperative, then (a) buried absorbable sutures should be preferred; buried non-absorbable temporary sutures should be our second choice; through-and-through sutures should be used only on compulsion; and buried permanent sutures discarded except in work on the hollow abdominal viscera. (b) Our aim should be to do the first dressing so that it will be the only one needed until healing is accomplished, and when this is impossible our efforts should be directed toward preventing the necessity of frequent dressing. (c) When in doubt, do not drain, but if drainage is imperative let it be adequate without being harmful, kept up while it is needed, and discarded so soon as it has fulfilled its mission.—*Medical Age*.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 233 DELAWARE AVE., BUFFALO, N. Y.

VOL. LXII.

FEBRUARY, 1907.

No. 7

The Water Supply of Buffalo.

THE question of a pure water supply for Buffalo is again being agitated. The people of the city, if they have anything to say about the matter at all, say it in the privacy of their own homes when they see the muddy water which is their portion after every little wind storm, and they say what they have to say where it can not affect their standing as christians and law-abiding people. It is difficult to understand just why Buffalo, situated as it is, at the very threshold of unlimited supply, should be so illy-provided with so necessary an article as pure water. Whether the fault lies with the people themselves or with the lobbyists and the grafters who have delayed matters for their own good fortune, or with the ingrown Buffalo tendency to wait in the hope that the water problem may work out its own salvation, The Journal does not pretend to say. But with the experience of scores of other cities and countless little towns which have provided their peoples with decent water, it surely should not be a difficult matter to form some comprehensive plan by which something tangible might be evolved.

There has been water talk enough to saturate a dozen cities of the size of Buffalo; all it has resulted in has been the employment of experts to advise regarding the system; the frequent and suspiciously persistent shriek of warning to boil the water, a cry which is so commonplace that it has become a joke and taken its place among the standing jibes of the local newspaper humorists.

There has been argument for and against this system and that; to build an intake far out in the lake would be best; to build such an intake would be the height of folly and idiocy; a filtration plant is what is needed; filtration is a curse and a

fraud; a reservoir in the Hamburg hills is the city's only salvation; such a work would wreck the city and the supply would be inadequate; and so it goes, with no result in sight and no relief.

The latest effort to get something like a human idea of what the situation really is—the consideration of the water question in its broadest sense by the Academy of Medicine at a recent meeting,—was productive of nothing at all except a triple row of damnations from Col. Ward, the Commissioner of Public Works. Of course, physicians do not know a thing about the water supply. Admitting that scientific men who make a business of proper water supply are invaluable as advisors in such cases, it still occurs to the casual observer that it might be of benefit to the city if the mayor should select several professional gentlemen who have neither axes to grind nor jobs to hunt, and get their views in official form, not alone on the present needs of the city in relation to water, but on the best method of supplying the necessity in the future. Let these men be so well placed that they would not be amenable to the flatteries of the filtration plant or other water contractors; their opinion would have the advantage of being based on what a good water supply should be for the people and not how much there is in the construction of a plant or an intake.

St. Louis, Boston, Washington and other cities have been through the same trouble; the only difference is that these cities have met the difficulty promptly—whether adequately or not, need not be here considered at this time. The fact that they, together with Cleveland and Detroit, have done something, means much for their progressiveness; this fact alone may be one of the reasons why both Cleveland and Detroit have dropped Buffalo behind them in civic progress and census returns.

On the surface Buffalo appears to be suffering at the present time from business anemia and a certain congenital sluggishness.

The Academy of Medicine made a good beginning in taking up the water question. Its mistake was in inviting the office-holder and opening the way for the Aldermanic farce of "hearing interested parties." What the Academy of Medicine should do is to wade into civic conditions affecting the public health, and wade deep; make of it as thorough a job as maybe; probe deep; praise with unstinted praise where good is found; where bad is found, damn loudly with unstinted damnation—and keep it up.

Buffalo has pure water within reach. The only thing necessary is to get it, and get it by a method which will insure not only purity but a quantity sufficient for the needs of the city of to-day and the inland metropolis of the future.

What Buffalo needs is civic surgery.

At present there is every probability that the proposed new intake to the Emerald channel will be three years building. 'Till then, Buffalo will suffer for water.

Annual Report of the State Cancer Laboratory.

THE annual report of the State Cancer Laboratory, the work of which is done in the Gratwick Laboratory building on High street, Buffalo, has been submitted to Dr. Eugene Porter, State Commissioner of Health. While there is nothing startling in the nature of discovery the report is interesting showing as it does that the increase in cancer is persistent and progressive, as Dr. Roswell Park pointed out in 1898. The figures showing comparative death rates for cancer and tuberculosis in two different groups of three years are startling in themselves. They show that tuberculosis has decreased 4.9%, and that cancer has increased 25.4%. The report states that the evidence is now sufficient for the Department of Health of the State of New York, as the result of researches conducted in this laboratory, to recommend to all health officers of the State, the desirability of proper sterilization and disposal of all dressings of cancer cases, the fumigation and sterilization of rooms occupied by cancer patients.

Although there is little evidence that individuals associated with cancer cases are in any immediate danger of contracting the disease, it is extremely probable that the contagion of cancer can be transferred from cancer patients to their surroundings, where in course of time it assumes a form in which it is again capable of infecting susceptible individuals.

This last statement is one which, though not novel in any sense, places the seal of official laboratory approval upon the similar statements made by Dr. Irving P. Lyon, of Buffalo, in his report of six or seven years ago, following his very painstaking investigations concerning the so-called cancer houses.

The present report deals rather fully with the work done by Ehrlich, of Frankfort, and the Royal Cancer Research Fund in London, and requests that the \$3,000 which was cut out of the appropriation last year be given to the laboratory in this year's budget. Commenting on the question of finance the report says:

In this connection I desire to call attention to the fact that the principals in the laboratory have, from the beginning, served it with great devotion on salaries which are not commensurate with their standing in the scientific world. The direction which cancer research has necessarily taken in the last two years necessitates the maintenance of a large staff of assistants, and with our present appropriation we are forced to employ a staff of thirteen individuals.

The relative expenditure for stock, material and equipment has so greatly increased by the direction which our work has necessarily taken, that the laboratory has from the first paid the lowest possible salaries to its employes. The great increase in the cost of living will make it necessary to remedy some of the greatest discrepancies in this connection during the coming year, unless the laboratory is to lose the services of some of its most important members.

The members of the staff are: H. R. Gaylord, director; G. H. A. Clowes, chemist; G. N. Calkins, biologist; F. W. Baeslack, assistant in biology and histology; C. A. Maclay, secretary; D. R. Averill, assistant in chemistry; F. A. Payne, janitor, and six assistants classed as laborers.

The expenditures for the past year were \$17,748.13. The laboratory should have more money for research purposes and if one were inclined to criticise the report at all it could only be on the score of excessive and retiring modesty of its author in relation to money matters. Too long has unselfish and self-sacrificing science been the plaything of commerce, and the toy of the politician. The State of New York is not poor and now that it has been definitely and officially shown by figures, which cannot lie, that cancer is on the increase, added impetus is given to the work of research. The paltry \$21,000 asked for is too small, far too small and insignificant an amount to meet the requirements of the staff of the State Cancer Laboratory as at present constituted, and particularly is this so when one seriously considers the amount of work being done in the institution. Not only is original research work being carried on night and day, but some one of the staff is closely and personally watching the progress of work in European laboratories much of the time. The State should appropriate whatever amount the members of the staff deem necessary for their requirements. To say the least it is humiliating for men of standing in the scientific world to be compelled to plead for increase of salary, to even beg for an increase of pay to meet the increased cost of living.

Health Department Problem.

HEALTH COMMISSIONER WENDE has cancelled the permit under which a slovenly butcher conducted a slaughter house. This was done after two hearings and a warning. The place maintained by this butcher was reported by Dr. Wende's inspector as "filthy."

Much time has been spent, since the slaughter house scandal, in searching out the unsanitary places in Buffalo in connection with its meat supply, and everything has been fairly well cleaned up.

There are other things which might be considered in connection with public health, matters which have been corrected by the health departments of other cities. One is flat wheels on the street cars which rip-slam-bang their riotous way through the residential streets making days disturbing and nights hideous.

The nerves of passengers would be relieved of rather high tension if attention were paid to the screeching of metal bound street car doors and the squawking of register rods.

Siren whistles with their unholy lost-soul wails, the assinine whistle salutes of tugs and boats which greet the arrival of anything new or novel in the marine line; the yells, the shouts, the curses and the "get-aps" and "whoa-a-a-as" and the banging of ash cans by the drivers and workers on the wagons of the Buffalo Sanitary Company which has the cleaning contracts; these are all matters which affect the public health and ought to be eliminated.

THE growth of the average finger nail is computed to be one-thirty-second of an inch a week, or a little more than an inch and a half a year. The finger nails, according to "Popular Science Siftings," are said to grow faster in the summer than in the winter. The nail on the middle finger grows faster than any of the other nails, and that on the thumb grows slowest. It is also said that the nails on the right hand grow faster than those on the left hand. According to the rate of growth stated, the average time taken for each finger nail to grow its full length is about four and a half months, and at this rate a man seventy years old would have renewed his nails one hundred and eighty-six times. Taking the length of each nail as half an inch, he would have grown seven feet nine inches of nail on each finger, and on all his fingers and thumbs an aggregate length of seventy-seven and a half feet.

It was a singularly beautiful law of nature, observes *The Tribunc*, which Mendeléeff, the Russian chemist, whose death is announced, was the first to observe. He noticed that when the elements were grouped on the sole principle of similarity of qualities a remarkable relationship also existed between the atomic weights of the members of a family. It was on the strength of that strange fact that Sir William Ramsay, after terrestrial helium and argon had been found, predicted the discovery of another primary substance resembling them and possessing characteristics which were distinctly specified. The forecast, it will be remembered, had a triple verification at Sir William's own hands. Within a surprisingly short time he added neon, krypton and

xenon to the list of previously recognised elements, and they all fitted with comparative exactness into the proper places in Mendeléeff's table.

THE offices of this Journal have been removed from 284 Franklin St., where they had been established for nearly twenty years, to 238 Delaware Avenue, corner Chippewa Street, in the Delaware Court Building. All communications relating either to the editorial or business management of the Journal should be sent to the new address.

PERSONAL.

DR. ALVAH H. DOTY has been reappointed Health Officer of the Port of New York. Governor Hughes makes his renomination in view of Dr. Doty's valuable public service to the state during the twelve years in which he has held the office.

A statement from the executive chamber said of Dr. Doty's service:

Dr. Doty was first appointed by Governor Morton in 1894, being then chief inspector of the division of contagious diseases in the Department of Health. He has served continuously as Health Officer ever since. Previous to his appointment the quarantine regulations had been managed in such a way that New York City was often threatened with contagious diseases brought in through the port. Dr. Doty's knowledge of the management of infectious and quarantinable diseases has prevented the recurrence of such dangers. By virtue of his office the Health Officer is a member of the Board of Health of New York City, and in this capacity Dr. Doty has rendered valuable services.

DR. JOHN FITZGERALD FAIRBAIRN, of Buffalo, has returned from Vienna where he has been engaged in special research work for the past 18 months. He served as volunteer assistant under Hofrat Politzer and Docent Koschin, of the University of Vienna, and also visited the larger ear, nose and throat clinics of Europe. He has opened offices at 155 Allen street (corner of Park street) and will limit his practice to diseases of the ear, nose and throat. Hours: 9 to 1 and 5 to 6; Sundays by appointment. Telephones: Bell, Tupper 1076; Frontier, 10261.

DR. W. W. KEEN, for nearly half a century closely identified with medical institutions of Philadelphia, resigned on January 3, 1907, as professor of surgery in the Jefferson Medical College with which he had been associated for 27 years. Upon the acceptance of the resignation the trustees of the institution elected

Dr. Keen emeritus professor of surgery. Dr. Keen's resignation is to take effect on March 15, after which he will sail for a year's tour abroad.

DR. L. T. HESS, captain surgeon, United States Army, has arrived at Fort Porter to take station as post surgeon. Dr. Hess came from Fort Lawton, Washington, relieving Dr. N. W. Wilson, of Buffalo, who has been acting as post surgeon since the departure of Dr. P. C. Fauntleroy, captain surgeon, United States Army, who was ordered to Cuba with the army of occupation.

DR. ETTORE MARCHIAFAVA, who succeeded the late Dr. Lapponi as private physician to the Pope, was born fifty-two years ago at Civita Vecchia, and was principally educated in Rome, where he is now professor of pathological anatomy at the university. He is the discoverer of the malarial parasite.

DR. JOHN YOUNG BROWN, superintendent and surgeon in charge of the St. Louis City Hospital, read a paper on "Some further observations on the surgery of the diaphragm" before the medical society of Wayne county, Michigan, at Detroit, on January 28, 1907.

DR. ARCHIBALD D. CARPENTER, 69 E. Parade Avenue, Buffalo, has been appointed civil service commissioner, vice Dr. Stephen Y. Howell, resigned.

DR. S GOLDBERG, of Buffalo, was elected president of the Cosmopolitan Club, January 10, 1907. Dr. George Roberts was elected treasurer.

DR. CHARLES A. CLEMENTS, of Buffalo, has resigned from the board of directors of the City Hospital for Women.

DR. CHARLES G. STOCKTON, of Buffalo, sailed January 19, 1907, for a tour in Europe.

OBITUARY.

DR. J. F. KRUG, a graduate of the Indiana Medical College in 1879, died of pneumonia on December 31, 1906, at his home, 744 Filmore avenue, Buffalo. Dr. Krug was born in Mecklenburg-Schwerin, Germany, and was educated in public and private schools. He came to this country at the close of the Franco-Prussian war and settled in Buffalo where he did art work. Later he went to Indianapolis and studied medicine. After

graduation he returned to Buffalo and began practice. He was a member of the medical society of the county of Erie. The funeral was held January 3, 1907.

DR. ELLIOTT H. WOOLSEY, of Oakland, Cal., a graduate of the University of Buffalo, 1868, died at his home January 21, 1907, of pneumonia, aged 65 years. He was a member of the Society of Physicians and Surgeons of Alameda County, of the Medical Society of the State of California, and of the American Medical Association. He was also for several years chief surgeon of the Southern Pacific Railway.

SOCIETY MEETINGS.

The State Medical Society.

THE one hundred and first annual meeting of the Medical Society of the State of New York was held at Albany on January 29 and 30, 1907. The meeting was one of the most successful in recent years and the following program of the scientific session is one of unusual excellence:

TUESDAY, JANUARY 29, 1907.

President's address.

Reception of delegates from other societies.

Danger Signals from the Skin—L. Duncan Bulkley, New York.

The Importance to Healthy Individuals of Periodic Aural Examination with Functional Tests—W. Sohier Bryant, New York.

Practical Legislation for the Prevention of Blindness from Ophthalmia Neonatorum—F. Park Lewis, Buffalo.

A Plea for New Methods in the Prevention of Blindness—Lucien Howe, Buffalo.

Chloroma, with Special Reference to the Ocular Symptoms—C. S. Merrill and A. J. Bedell, Albany.

SYMPOSIUM ON NON-TUBERCULOUS JOINT INFECTIONS.

1. The Pathology of Non-tuberculous Joint Infections with exhibition of specimens—E. H. Nichols, Boston.

2. Pneumococcus and Typhoid Infections—Roswell Park, Buffalo.

3. Syphilitic and Gonorrheal Infections—R. H. Sayre, New York.

4. Staphylococcus and Streptococcus Infections—Lucius W. Hotchkiss, New York.

5. Diagnosis and Symptoms of the Rheumatoid Diseases—R. R. Fitch, Rochester.

6. Mechanical Treatment—H. L. Taylor, New York.

7. Operative Treatment. Walter Wood, Brooklyn.

New York State Medical Library—Albert Vander Veer, Albany.

State Aid for Medical Libraries—Smith Boker, Utica.

Some Questions Involved in Sending an Invalid Away from Home—J. H. Pryor, Buffalo.

Sanatorium Treatments; their Therapeutic Value—P. O. Kinnear, Clifton Springs.

Syphilitic Lesions of the Eyelids, with Reports of Cases—Frank Judson Parker, New York.

Some of the Fallacies in the Treatment of Syphilis—Samuel Alexander, New York.

The Spirocheta Pallida with Lantern Slide Demonstration—James Ewing, New York.

SYMPOSIUM ON CANCER.

A Synopsis of the Work of the Buffalo State Laboratory during the past Eight Years. Retrospective and Prospective—Roswell Park, Buffalo.

Parasitism and Infection—Harvey R. Gaylord, Buffalo.

Cancer and Immunity—G. H. A. Clowes, Buffalo.

Cancer as a Biological Problem—Gary N. Calkins—New York.

Lantern Slide Demonstration and Exhibition of Specimens.

WEDNESDAY, JANUARY 30, 1907.

Sahli's Desmoid Reaction—H. W. Carey, Troy.

The Abortive Treatment of Pneumonia—G. Lenox Curtis, New York.

A New Disease: History, Symptoms and Pathology of a Hitherto Unreported Lesion—Henry P. De Forest, New York.

Blood Pressure Study; Some Unexpected Revelations—Henry L. Elsner, Syracuse.

The Clinical Forms of Blood Pressure Changes—Louis Faugères Bishop, New York.

Some Clinical Experiences with Arteriosclerosis—Henry G. Webster, Brooklyn.

The Criminal Lunatic; His Status and Disposition—Robert B. Lamb, Matteawan.

Imperative Impulses in the Neurotic Resembling Obsessions in the Insane—Edward D. Fisher, New York.

Visions of Mary Czajka—Francis E. Fronczak, Buffalo.

Typhoid Fever; Report of a Series of Cases with a Low Death Rate—William S. Hubbard, Brooklyn.

The Importance of the Routine Examination of the Urine for Indican—Joseph Day Olin, Watertown.

Underfeeding and its Associated Ills—Dudley D. Roberts, Brooklyn.

A Certain Danger in the Use of Chloroform—Arthur W. Booth, Elmira.

The Technic of the Ablation of the Breast—Parker Syms, New York.

Surgical Treatment of Goiter—Martin B. Tinker, Ithaca.

Clinical Features and Operative Treatment of Thyroid Affections—George E. Beilby, Albany.

Some Recent Clinical Observations in Intestinal Obstruction, both Acute and Chronic, with Demonstration of Specimens and Illustrations—Joseph C. Bloodgood, Baltimore.

The Surgery of Foreign Bodies in the Respiratory Tract—W. G. Macdonald, Albany.

Contribution to the Casuistry of Foreign Bodies in the Uterus—B. S. Talmey, New York.

Further Observations Upon the Treatment of Diffuse Septic Peritonitis, with a report of One Hundred and Forty-five Cases Treated by the Elevated Head and Trunk Position—Russell S. Fowler, Brooklyn.

Cyst of the Mesentery; Resection of Twenty Inches of Small Intestine; Recovery—Edgar A. Vander Veer, Albany.

Mechanical (Surgical) Constipation—Samuel G. Gant, New York.

The Treatment of Ventral Hernia—A. V. Moschowitz, New York.

Vaginal Cesarean Sections, their Limitations, Indications and Technic, with Report of Two Cases—H. Judson Lipes, Albany.

The annual banquet was held at the Hotel Ten Eyck on January 30, at 7:30 P. M. The officers elected were—president, Frederick C. Curtis, Albany; vice-presidents, Julius Bierwirth, Brooklyn, Edward Torrey, Allegany, and Nelson G. Richmond, Fredonia; secretary, Wisner R. Townsend, New York; treasurer, Alexander Lambert, New York.

THE BUFFALO ACADEMY OF MEDICINE held meetings during the month of January, 1907, as follows:

At a stated meeting of the Academy, January 8, a discussion for improving and increasing the city water supply was held. The various proposed measures were discussed by Col Francis G. Ward, commissioner of public works; Mr.

George R. Sikes, civil engineer; Mr. Frank J. Tresise, civil engineer; councilman John J. Smith, and Dr. P. W. Van Peyma.

Section on Medicine.—Tuesday, January 15. Program: symposium on gastric ulcer: (a) medical aspects, Albert G. Woehnert; (b) surgical aspects, Eugene A. Smith; (c) discussion by Charles G. Stockton, Marshall Clinton.

Section on Obstetrics and Gynecology.—Tuesday, January 29. Program: (a) prolapse of the uterus, Charles E. Congdon; (b) unnecessary operations, especially in the female, J. Henry Dowd; (c) Herman E. Hayd exhibited a specimen of lithopedion, of 32½ years' duration, which he removed from a woman 67 years of age.

At the annual meeting of the Harvard Medical Society of New York, held at the residence of Dr. George E. Brewer on January 26, 1907, the following officers were elected for the ensuing year: president, Dr. J. Hilton Waterman; vice-president, Dr. Carleton P. Flint; secretary, Dr. George D. Scott; treasurer, Dr. Edward W. Pinkham; executive committee, Drs. W. Sohler Bryant, Edward K. Dunham, Follen Cabot.

THE regular meeting of the Esculapian Club was held at the Touraine Hotel, Thursday, January 17, at 8:30 P. M. The host was Dr. J. W. Charters and the subject of the evening's discussion was "Bradycardia," with presentation of cases.

At the annual meeting of the Allegany Society, of Buffalo, held on January 10, 1907, Dr. Albert E. Persons was elected president.

COLLEGE AND HOSPITAL NOTES.

GROUND will soon be broken in Buffalo for the erection of the new Marine Hospital which it is expected will be completed in about a year. The hospital will be a three-story and a basement building 114 feet long with an average width of 62 feet, and will be constructed of brick with stone and terra cotta trimmings. A large two-story piazza will be constructed in the rear of the central part of the building. Iron staircases will lead to the upper floors and there will be adequate elevator service.

The basement will contain the steamheating apparatus, the engines for elevators, together with the workshops and essential storerooms. On the right and left of the main entrance will be the hospital offices. The dispensary, laboratory, reception

rooms, surgeons' room, bedrooms, and several private rooms for patients will be located on the first floor.

The second floor will contain the wards, dining room, smoking room, officers' wards, and baths, while the third floor will have the surgical ward, sterilising rooms, operating room, etherising room, kitchen, baths, and a few private rooms.

A feature is the location of the kitchen on the third floor. The dormitories of the attendants, located in the upper stories, will contain reading rooms, lounging rooms and separate toilet facilities. The ambulance service will be under contract.

THE annual report of the New York Post-Graduate Hospital for the year ending October 1, 1906, lately made public, shows a marked increase in the facilities of the institution. The laboratory has been enlarged and an obstetrical ward has been added. For the training school for nurses the building next to the Fahnestock Home has been leased and thoroughly fitted. The nursing staff of the hospital now numbers ninety-nine members. Two wards for diseases of the eye, ear, nose and throat have been equipped.

The patients treated during the year increased to 3,536; dispensary patients, 1,334; visits to the dispensary increased by 6,667. The average daily number of patients in the hospital was 161. The receipts from all sources were \$104, 512.04, disbursements \$145,549.25, leaving a deficit to be made up by the Post-Graduate Medical School of \$41,037.21.

THE LACKAWANNA STEEL COMPANY has completed the new dispensary on the grounds of the plant at West Seneca (Buffalo). It is a two story brick building completely equipped for operative work. Heretofore, injured workmen were given first aid at the dispensary and when operation was needed it became necessary to remove them to the Moses Taylor Hospital. Now, however, emergency surgery can be done at the new dispensary and the patient later removed to the hospital.

MRS. CHARLES W. PARDEE, president of the Board of Managers of the Buffalo Children's Hospital, has made a gift of a new building to the hospital, assuming the entire expense of structure. The work will be begun at once. The land on which the new hospital is to stand was presented last summer by Miss Martha T. Williams, and adjoins the present hospital building on Bryant street.

DR. RANDALL announces the appointment of Dr. Harry A. Trick, Dr. Charles P. Chapin and Dr. Clark as trustees and physicians in charge of the Riverside Accident Hospital dispensary. Dispensary hours are from 4 to 6 P. M. daily

BOOKS AND AUTHORS.

Genitourinary Diseases and Syphilis. By **Henry H. Morton, M.D.**, Clinical Professor of Genitourinary Diseases in the Long Island College Hospital. Illustrated with 158 Half-tone and Photo-engravings and 7 Full-page colored plates. Second Edition. Revised and Enlarged. Royal Octavo, 500 Pages. Philadelphia: F. A. Davis Company. 1906. (Price, \$4.00 net).

The worth of this book is best evidenced by the fact that a second edition has been found necessary. This is not only due to a general awakening as to the importance of genitourinary practice and a better and more rational understanding of its principles but also to the fact that the work approaches the ideal in make-up and in its presentation of the subject. There is every evidence that the author has gone carefully over the whole work and done much to improve it in the way of rewriting and amplification. He has kept pace with the advancements in the specialty and in the majority of instances gives the best and most up-to-date treatments for the ailments which beset the average genitourinary patient. Among the matters more fully gone into in this edition are surgical operations on the prostate and a clear expression of the pathologic anatomy and inflammatory affections of the organ. Much space is given to surgical diseases of the kidney, their diagnosis and treatment. It is a concise and helpful book, not very large as textbooks go, nowadays, but containing everything that the average worker in medicine need know; for those who wish to give more time than passing attention to genitourinary matters it is sufficient to lay a solid foundation for serious study and successful practice.

Naturally, Morton gives his personal views preference and there are times when his positive enthusiasm would have a tendency to mislead, as for instance, where he objects to the use of cocaine and penis ligation in circumcision. He prefers the clamp method and bases his objection to cocaine on the ground that the infiltration of tissues prevents cleanly operation and subsequent healing. In the writer's experience the cocaine method without the use of a clamp possesses none of the objections so seriously raised by Morton and the results have been so much better than with the clamp that the latter has been permanently discarded. It would appear better to leave the clamp method to the undisputed use of the rapid-fire general surgeon who rushes through a circumcision with the careless insouciance of the easygoing appendectomist. In meatotomy Morton advises that cocaine be injected into the frenum by hypodermic. That is hardly necessary if one aims to save the patient the least possible pain, and that should be one of the chief aims of the genitourinary surgeon. Meatotomies may be done without the slightest pain by inserting within the meatus a pledget of cotton saturated with 20% cocaine and allowing it to remain there three minutes before cutting. Still, these are minor matters and in no wise detract from the value of the book which, although it is smaller than many of

the more pretentious works on the subject, is much more lucid than some of its bulky and heavy-lidded companions.

Especially excellent is the section devoted to the anatomy of the urethra; this is particularly intelligible and one does not flounder about in a maze of poor rewriting only to emerge from the chapter a-wonder at the ingenuity of human transposition.

Too much credit cannot be given Dr. Morton for the very clear manner in which he presents pseudo-gonococcic urethritis and the urethritis due to staphylococcic and streptococcic infections. For this one section alone if for no other, the book would be well worth the study of the average general practitioner who makes his diagnosis and outlines a treatment on the mere visual inspection of a drop of pus at the meatus. There are some new ideas in the treatment of chancroid and its complications, but one must question the author's general condemnation of the dissecting out of enlarged inguinal nodes prior to suppuration. He prefers to allow the node to go on to suppuration, and then make a very small incision and inject the cavity with iodoform glycerine, thus curing the bubo in "five or six days." This is an excellent method—in some cases; but there is nothing logical or practical in the sweeping condemnation of the cleaning off of the groin. Morton says a condition simulating elephantiasis of the penis and scrotum follows this procedure as a result of interference with lymphatic circulation. In something over a hundred dissections recently done under local and general anesthesia, there has been not the slightest sign of such a sequel; on the contrary the results have been uniformly successful and healing has been rapid and uncomplicated.

In spite of these minor details of personal preference and individual practice in procedure the book stands without a peer among the smaller works and in some respects it surpasses many of the larger volumes. The appendix is a mine of information, detailing as it does laboratory technic covering the examination of secretions of every character and the preparation and staining of slides for tubercle bacilli, spermatozoa, and the spirocheta pallida.

The illustrations are excellent, many of them being from the authors' cases. There are 158 half tones and seven full page plates in color which are most artistic. Dr. Morton deserves hearty congratulations on the manner in which he has put together the book and for the very interesting manner in which he has handled a most difficult specialty in medicine.

N. W. W.

Prevalent Diseases of the Eye. By Samuel Theobald, M.D., Clinical Professor of Ophthalmology and Otology, Johns Hopkins University. Octavo of 551 pages, with 219 text-illustrations, and 10 colored plates. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$4.50 net; half morocco, \$5.50 net).

Among the recent books sent out to the profession this one must be accorded a high place. It is not a book for the special-

ist, though he may learn much from a study of its pages. It is a treatise for the general practitioner in particular,—a book for anybody who may be called upon to give an opinion concerning a diseased or injured eye, or to treat it.

Theobald has presented a practical treatise on the prevalent diseases of the eye, one that will stand the test of severe scrutiny, one the specialist must approve and the generalist applaud. It may seem odd that a treatise on the eye should appear in these days without a description of the ophthalmoscope and its method of use, yet here is just such a work. The author explains that the great majority of physicians,—general practitioners,—are not skilled in the use of the ophthalmoscope, and are not likely ever to become so, hence it is not worth while to take the time and trouble to deal with such a technical instrument in a book of this character.

It is recommended, instead, that every practitioner likely to be called upon to treat diseased or injured eyes, should acquire the skill necessary to the successful employment of oblique illumination. This is easily mastered and the means are simple,—a reasonably dark room, a light, a biconvex lens two to two and a half inches in diameter, and that is all. In the city a gas jet or an electric lamp can be utilised, in the country a student lamp or even a candle can be employed. Theobald gives instructions as to the method of employing oblique illumination, and illustrates the process by a splendid photographic reproduction. The first two chapters, relating to methods of diagnosis and treatment, abound with common sense and give useful hints relating to each topic.

The chapters that follow deal, respectively, with diseases of the eyelids and orbit, 63-117; diseases of the lacrimal apparatus, 118-150; diseases of the conjunctiva, 151-201; diseases of the cornea and sclera, 202-245; diseases of the iris and ciliary body, 246-274; glaucoma, 275-294; diseases of the crystalline lens and vitreous humor, 295-337; diseases of the choroid coat and optic nerve, 338-387; anomalies of refraction and accommodation, 388-437; muscular anomalies of the eyes, 438-479; injuries of the eye and its appendages, 480-504; and an appendix of approved formulæ, 505-520.

The make-up of the book is such as to please the eye, the columns being slightly narrower than usual, the type larger, and the spaces between the lines wider. We mention these features because they are out of the common order and are excellent. The illustrations add interest to the study of the text. This work takes rank among the foremost books of the year 1906, and will find a lasting place in medical literature.

Diseases of the Stomach. By Max Einhorn, M.D., Professor of Clinical Medicine at the New York Post-Graduate Medical School and Hospital. Fourth revised edition. Octavo, pp. 559. Illustrated. New York: William Wood & Co. 1906. (Price, \$3.50).

Ten years and more ago, when Einhorn put out the first edition of this work, it was recognised at once as the most

scientific exposition of diseases of the stomach that had been issued in this country. The standard it set up for itself has been maintained through subsequent editions, sent out from time to time as occasion required, the present one being a thorough revision of the whole topic, bringing it down to the year 1906, and including the latest technic of diagnosis and treatment.

It is an interesting fact that the first scientific step in the study of the functions and disorders of the stomach, was taken in this country. Beginning with the famous Beaumont-St. Martin experimental research in 1825, interest was revived in 1867, after a long period of quiescence, when Kussmaul introduced the use of the stomach pump in the treatment of dilatation of the stomach, an instrument made use of later by Leube for the purposes of diagnosis. The names, too, of Ewald, Boas, Reichmann, Riegel and some others are intimately associated with studies relating to functions and diseases of the stomach.

In this country Austin Flint, Delafield, Pepper and others were among the earlier contributors to our knowledge of gastric diseases, and more recently Charles G. Stockton and Allen A. Jones, of Buffalo, Francis P. Kinnicutt, of New York, Hemmeter, of Baltimore, D. D. Stewart, and a number of other investigators have carried the work forward to its present status. But no one, perhaps, has contributed to the brilliant results of the present day in a greater degree than Einhorn himself, and in this treatise he gives the student and practitioner a clear presentation of the subject.

The general appearance of this edition is quite similar to the last one, though several additions have been made. The text has been thoroughly revised and as the work now stands it gives expression to the latest thought concerning the diagnosis and management of diseases of the stomach.

Surgery has contributed not a little in recent years to a better understanding of some gastric conditions, especially ulcer, for which Einhorn gives due credit. Weir, of New York, was one of the first to operate for this lesion. Henry Howitt, of Guelph, Ont., has also operated successfully for ulcer and has contributed importantly to the literature of the subject.

Every one who desires to obtain proficiency in the management of stomach diseases will assuredly derive benefit from a study of the methods set forth by Einhorn in this valuable treatise.

Clinical Diagnosis. A Textbook of Clinical Microscopy and Clinical Chemistry. By **Charles Phillips Emerson**, A.B., M.D., Resident Physician in John Hopkins Hospital; Associate in Medicine in the John Hopkins University. Octavo, pp. 661. Illustrated. Philadelphia. J. B. Lippincott Co. 1906.

Among the many textbooks relating to clinical diagnosis, some of which are most excellent expositions of the subject, none has dealt with it in quite the same fashion as this one. The au-

thor has had a large experience in charge of the clinical laboratory and as instructor in medicine at Johns Hopkins hospital and university, besides having at his disposal the clinical records for seventeen years. The object of the laboratory course at that institution, is not so much to impart knowledge as to raise the efficiency of the student; it is a course not in chemistry and microscopy alone, but in the application of these sciences to the study of the patient himself; not a study in physiology, but one in pathology.

Emerson lays great stress on the examination and study of the sputum, which he says is fast becoming a lost art. This is due, in part, he thinks, to the fact that the discovery of a few specific organisms and the hope of finding more have led to the neglect of the study of the fresh sputum. As a result, the many points which observers of only a generation back were careful to note, are now not looked for at all, or are not seen. The author then proceeds in detail to describe the examination of fresh sputum, for which he says the eyes and nose must be trained as to enable the physician to determine the nature of the case, its stages, or the complication it presents. He appropriates over sixty pages to this description and illustrates them with eighteen figures.

Emerson deals with the urine much in the same fashion, devoting about two hundred and twenty-five pages to the topic. The gastric contents, the intestinal contents and feces, the blood, and, finally, the various body fluids are dealt with in their regular order, the whole making a most instructive and fascinating volume. The chapter on the urine is especially exhaustive and we commend its study to every clinician, as well as to every physician whose duty it is to examine recruits, persons for life insurance, or for any position or occupation where sound kidneys are requisite, or where diseased kidneys must be promptly detected.

The entire work is of unusual value, each section being of special merit. We have simply taken the chapters on the sputum and urine to illustrate the importance of the work in its clinical aspects and to accentuate the author's methods. The book is at once a laboratory working manual and a clinical textbook on diagnosis. It will find its way into every teacher's hands and into every well appointed library.

Photoscopia (Skiascopy or Retinoscopy). By **Mark D. Stevenson**, M.D., Ophthalmic Surgeon to the Akron City Hospital; Oculist to the Children's Home, Akron, Ohio. Octavo of 126 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$1.25 net).

"Photoscopia is the method of estimating the refractive error of an eye, by reflecting light into it by a plane or concave mirror, and observing the size, shape, brilliancy, direction, and rate of movement of an area (image) of light apparently in the observed eye."

We have thought of no better way to introduce a notice of this book than to quote the author's definition of its subject-title, as given in his opening paragraph. It at once discloses his purpose—namely, to describe the most approved methods of practising photoscapy.

While there are already several excellent works describing the test variously called retinoscopy, skiascopy and shadow-test, Dr. Stevenson has, under the term photoscapy, given us one of the most clearly written and best manuals on this subject. For reasons which he gives he thinks this name to be more accurate than any of the others yet proposed. The work begins, as we have already remarked, with a definition of photoscapy, emphasises its value, and describes the necessary instruments and their use. The author outlines the optical principles underlying the test, and by illustrative experiments and observations he shows how they are applied to the determination of the refractive condition of the eye. In this method of examination he prefers the use of the plane to the concave mirror, in the great majority of cases. The book contains numerous original illustrations and is well made up. A historical sketch and a splendid bibliography follow. We cordially recommend the work as a trustworthy guide to this subject and congratulate the author on the success which he has attained in presenting the topic.

A.

Atlas and Textbook of Human Anatomy. Volume I. By **Professor J. Sobotta**, of Wurtzburg. Edited, with additions, by **J. Playfair McMurrich**, A.M., Ph.D., Professor of Anatomy at the University of Michigan, Ann Arbor. Quarto volume of 258 pages, containing 320 illustrations, mostly in colors. Philadelphia and London: W. B. Saunders, 1906. (Cloth, \$6.00 net; half morocco, \$7.00 net).

The improvements in the methods of teaching anatomy within the last decade or two have been very marked indeed, to which this atlas and textbook bears abundant testimony. The object lesson afforded by an accurate illustration is one not easily forgotten, and this volume, dealing with the bones, ligaments, joints, and muscles, contains a multitude of beautiful engravings, true to nature and artistic in design and execution. Take the spinal vertebræ, for example, and we do not see how it would be possible to make them clearer, or how even the novice could fail to understand them as to purpose and mechanism.

The employment of multicolor lithography is made to good purpose; especially does this become a strong feature in the section on myology. The muscles of the trunk are brought out with anatomic and artistic perfection, displaying their origin, insertion, and relations in many instances with more effective instruction than could be done in any other manner. As an example we may refer to figure 236, opposite page 144, which is the most beautiful exhibition of muscle coloring we have seen.

It is unnecessary to pursue the subject further, to indicate the usefulness of the work. The student and practitioner of medicine, for whom it is especially designed, will not be disappointed in the work, which is the most important recent contribution to the literature of human anatomy.

Dose Book and Manual of Prescription Writing: with a List of the Official Drugs and Preparations, and the more important Newer Remedies. By **E. Q. Thornton**, M.D., Assistant Professor of Materia Medica, Jefferson Medical College, Philadelphia. Third Edition, Revised and Enlarged; Adapted to the New (1905) Pharmacopeia. 12mo, 392 pages, illustrated. Philadelphia and London: W. B. Saunders & Company, 1905. (Bound in flexible leather, \$2.00 net.).

A glance at the contents of Dr. Thornton's book fully explains its scope. In addition to the consideration of the official and the more important nonofficial preparations intended for internal administration, weights and measures, solubilities, and incompatibilities, attention is given to the grammatic construction of prescriptions, illustrated by examples. In revising the text for this edition Dr. Thornton has made it to conform with the new (1905) pharmacopeia, the radical change in strength or name of many chemicals, drugs, and preparations already official, and the admission of many newer remedies necessitating the re-writing of a number of sections. We notice in the appendix an addition of much value—a table showing the change in strength of important preparations, and also a list of average doses for adults in accordance with the new pharmacopeia. Dr. Thornton's dose book is, as it always has been, accurate and up to date.

Obstetrics for Nurses. By **Joseph B. DeLee**, M.D., Professor of Obstetrics in the Northwestern University Medical School, Chicago. Second Revised Edition. 12mo., 510 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$2.50 net).

In preparing such a work as this,—a treatise on obstetrics for nurses,—it is not easy to determine just how much shall be included, or just how much shall be left behind, pertaining to the science and art of obstetrics. DeLee has been most fortunate in this respect; he has presented enough for the advanced obstetric nurse and has given, as well, the necessary instruction to the beginner in this line of nursing.

Some changes have been made in this edition, notably in adding forty new illustrations and increasing the reading text by the addition of forty-seven pages; in describing the so-called vaginal Cesarean section, and the operation of pubiotomy,—both now quite in vogue, and in discussing the later methods in dealing with obstetric complications, and technic. In its present form it cannot fail to prove useful, also, to medical students and junior practitioners. The illustrations are of a high order, and, altogether, the author has demonstrated his ability as a teacher of the modern obstetric art.

Practical Dermatology. A condensed manual of diseases of the skin. By **Bernard Wolff**, M.D., Clinical Professor of Diseases of the Skin in the Atlanta College of Physicians and Surgeons. Large octavo, pp. 288. Illustrated. Chicago: Cleveland Press. 1906.

The author of this book aims to present the salient features of diseases of the skin in such compact form as to meet the requirements of the general practitioner as well as the student of medicine. The several affections are dealt with in alphabetical order. None are treated exhaustively but each is handled with conciseness, the leading features only being given in abstract.

A number of excellent pictures illuminate the text, some being of rare conditions that are seen but once in a lifetime. The shape of the book is awkward, but it is one that contains valuable material which cannot fail to prove helpful to students and junior practitioners, and to all who may wish to consult a manual giving the essentials, when time is too limited to examine an exhaustive treatise. A number of excellent formulæ are given both in the text and in a separate section at the end of the book.

BOOKS RECEIVED.

International Clinics. A quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A.M., M.D. Volume IV. Sixteenth series. 1906. Philadelphia and London: J. B. Lippincott Co. (Cloth, \$2.00).

Woman in Girlhood, Wifehood and Motherhood. Her responsibilities and her duties at all periods of life and a guide in the maintenance of her own health and that of her children. By M. Solis-Cohen, A.B., M.D., Instructor in Physical Diagnosis, University of Pennsylvania. Profusely illustrated with color-plates, scientific drawings and half-tone engravings and manikin chart printed in colors. Octavo, pp. 500. The John C. Winston Company, Philadelphia. (Price, \$2.00).

The Practice of Obstetrics. By Eminent Authorities. Edited by Reuben Peterson, A.B., M.D., Professor of Obstetrics and Diseases of Women in the University of Michigan, Department of Medicine and Surgery, Ann Arbor, Mich. Large octavo, about 1087 pages, with 523 engravings and 30 full-page plates in colors and monochrome. Lea Brothers & Co., Philadelphia and New York, 1907. (Cloth, \$6.00; leather, \$7.00; half morocco, \$8.00, net prices).

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. IX. Anatomy, Physiology, Pathology, Dictionary. Edited by W. A. Evans, Adolph Gehrmann, William Healy. Series 1906. Chicago: The Year Book Publishers. (Price, \$1.25; entire series, \$10.00).

The Practical Medicine Series of Year Books. Ten Volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. X. Skin and Venereal Diseases, Nervous and Mental Diseases. Edited by W. L. Baum, Hugh T. Patrick, William Healy. Series 1906. Chicago: The Year Book Publishers. (Price, \$1.25; entire series, \$10.00).

A Treatise on Orthopedic Surgery. By Royal Whitman, M.D., Instructor in Orthopedic Surgery in the College of Physicians and Surgeons, New York; Chief of Orthopedic Department in Vanderbilt Clinic, New York. Third edition, revised and enlarged. Octavo, 900 pages, with 554 illustrations, mostly original. Lea Brothers & Co., Philadelphia and New York, 1907. (Cloth, \$5.50 net).

Starr on Nervous Diseases. Organic and Functional Nervous Diseases. By M. Allen Starr, M.D., Ph.D., LL.D., Professor of Neurology in the College of Physicians and Surgeons, New York. Second edition, revised. Octavo, 824 pages, with 282 engravings and 26 full-page plates. Lea Brothers & Co., Philadelphia and New York, 1907. (Cloth, \$6.00, net; leather, \$7.00, net).

Lea's Series of Pocket Textbooks. Diseases of Children. By George M. Tuttle, M.D., Attending Physician to St. Luke's Hospital, St. Louis, Mo. 2d edition, revised. 12mo, 392 pages, with 5 plates. Edited by Bern. B. Gallaudet, M.D. Lea Brothers & Co., Philadelphia and New York, 1907. (Cloth, \$1.50; flexible leather, \$2.00 net prices).

Syllabus of Lectures on Human Embryology. With a Glossary of Embryological Terms. By Walter Porter Wanton, M.D., Professor of Clinical Gynecology and Professor adjunct of Obstetrics in the Detroit College of Medicine. Third edition. Illustrated. 12mo., pp. 136. Philadelphia: F. A. Davis Co. 1906.

Plaster of Paris and How to Use It. By Martin W. Ware, M.D., Adjunct Attending Surgeon, Mount Sinai Hospital; Surgeon to the Good Samaritan Dispensary; Instructor in Surgery, N. Y. Post-Graduate Medical School. 12mo; 72 illustrations, about 100 pages. New York: Surgery Publishing Co. (Cloth, \$1.00).

Practical Dietetics, with reference to Diet in Disease. By Alida Frances Pattee, Late Instructor in Dietetics, Bellevue Training School for Nurses, New York. Fourth edition, 12mo, cloth. 300 pages. New York: A. F. Pattee, Publisher, 52 West 39th Street. (Price, \$1.00 net).

Tumors of the Cerebrum. Their Focal Diagnosis and Surgical Treatment. By Charles K. Mills, Charles H. Frazier, William G. Spiller, George E. de Schweinitz, and Theodore H. Weisenburg. Small 8 vo., pp. 35. Philadelphia: Edward Bennock, 3609 Woodland Avenue. 1906.

Woman. A Treatise on the Normal and Pathological Emotions of Feminine Love. By Bernard S. Talmey, M.D., Gynecologist to the Metropolitan Hospital and Dispensary, New York. 12mo., pp. 300. Illustrated. New York: Stanley Press Co. (Price, \$3.00).

Conservative Gynecology and Electro-Therapeutics. By G. Betton Massey, M.D., Attending Surgeon to the American Oncologic Hospital, Philadelphia. Fifth edition. Illustrated. Octavo, pp. 467. Philadelphia: F. A. Davis Co. 1906.

Diseases of the Stomach and Intestines. By Boardman Reed, M.D., Late Physician in Chief to the Samaritan Hospital, Philadelphia. Second edition. Illustrated. Octavo, pp. 1021. New York: E. B. Treat & Co. 1907. (Price, \$5.00).

The Hygiene of Pregnancy. By Walter B. Jennings, M.D., Attending Physician to St. Mary's Free Hospital for Children. New York: Medical Review of Reviews. (Price, 25 cents).

Transactions of the American Surgical Association. Vol. 24. Edited by Richard H. Harte, M.D., Recorder of the Association. Philadelphia: William J. Dornan, Printer.

The Harvey Lectures, delivered under the auspices of the Harvey Society of New York. 1905-1906. Philadelphia and London: J. B. Lippincott Co.

Transactions of the Maine Medical Association. Vol. XV. Part III. Walter E. Tobie, M.D., Secretary.

LITERARY NOTES.

P. BLAKISTON, SON AND COMPANY, Philadelphia, announce that timeliness of interest, aside from any other condition, lends especial importance to the early publication of *Foods and Their Adulteration*, by Harvey W. Wiley, M.D., to be immediately followed by a companion volume, *Beverages and Their Adulterations*. Dr. Wiley is Chief Chemist to the United States Department of Agriculture, at Washington, and his wide researches in the interests of purity in food commodities give anything he might write on the subject an authoritativeness that is unquestioned. The fact that the new National Food and Drugs Law became effective January, 1907, and that public interest in it is now intense, will no doubt result in a demand for both volumes. The books will be generously illustrated from original photographs and drawings.

W. B. SAUNDERS COMPANY, Philadelphia and London, have just issued a revision of their illustrated catalogue of medical, surgical and scientific publications. This is one of the most elaborate and useful catalogues we have seen. The descriptions of the books are full, the specimen illustrations representative of the pictorial feature of the books from which they are taken, and the mechanical get-up is entirely in keeping with the high order of the context. The authors listed are men of eminence in every branch of medical science. The catalogue is well worth having, and a copy will be sent free upon request.

ITEMS.

THE ANTIKAMNIA calendar for 1907 is an exquisite bit of art work entitled "The Convalescent." The picture is a reproduction of the painting by Miss Magnus which was exhibited in the Manchester Academy.

THE STATE CIVIL SERVICE COMMISSION will hold examinations in all parts of the State February 23, 1907. Among the positions to be filled are, apothecary, \$540 to \$900 and maintenance; homeopathic pharmacist, \$900 and maintenance; pharmacist, Erie County service, \$720; physician, sixth grade, \$900 and maintenance; pupil nurse, Erie County Hospital, \$10 a month and maintenance.

The last day for filing applications for these positions is February 18th. Full information and application forms for any of these examinations may be obtained by addressing Charles S. Fowler, Chief Examiner of the Commission at Albany.

NEW REGULATIONS PROPOSED FOR THE HEALTH DEPARTMENT OF BUFFALO.—The charter revision committee, through its subcommittee, has drafted resolutions governing the health department. The regulations provide that the health commissioner is to be appointed by the mayor (as he is now), and must be a reputable, licensed physician with actual experience in practice of not less than seven years. The commissioner is to appoint his assistants and, with the council's concurrence, shall fix their salaries. In time of "great and imminent peril to the public health," the commissioner of health may take such measures for safety as he deems necessary. As at present he will have supervision over dead bodies, and the registration of births, marriages and deaths. It is also provided that he shall make rules and regulations for enforcement of all laws and ordinances for the protection of public health and care of vital statistics. One section not only authorizes but requires him to prepare ordinances for licensing all persons offering to give massage and medicinal baths, and all persons and organizations advertising to practise medicine in any of its branches. He is further empowered to enforce all health ordinances and is given greater power over tenements than is provided for in the present charter. All drainage, plumbing, etc., in all kinds of buildings shall be subject to the commissioner's approval and if not prohibited by statute or law, the commissioner is empowered to permit or prohibit the building of dwellings to be used by more than two families, of livery stables, barns in which live stock is to be kept, slaughterhouses or rendering plants; or the transforming of present buildings into structures for any of such uses.

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

MARCH 1907.

No. 8

ORIGINAL COMMUNICATIONS.

The Surgical Aspect of Gastric Ulcer.¹

By EUGENE A. SMITH, M. D., Buffalo, N. Y.

TO my mind a discussion of the surgical aspect of gastric ulcer in no way indicates a conflict between the surgical and medical viewpoints of the subject, nor do I mean to say that the surgical or operative treatment of gastric ulcer is of paramount importance in the treatment of all such cases. I am free to say this subject has a broad medical basis of diagnosis and treatment upon which in appropriate cases treatment rests. The burden of diagnosis falls upon the internist in fact, and also the treatment in practically all cases for the first few days, weeks or months, sometimes even for years. I think it is fair to say that the importance of the discussion of the medical aspects of gastric ulcer is not lessened, but the essential features of diagnosis and treatment are emphasized when it is granted that certain classes of gastric ulcer need surgical treatment.

In a free discussion leading to the classification of cases which are surgical, I may go over ground already ably covered by Dr. Woehnert in his discussion of the etiology, symptomatology and treatment of gastric ulcer. This risk of repetition I must run, or feel that as a surgeon I am reduced to the position of a mere mechanic for whom diagnosis is made and a command issued by the internist to do for one case a gastrojejunostomy, for another a pyloroplasty, pylorotomy, a gastrotomy, a gastroplication or a gastrectomy. If the internist and surgeon do not work in harmony in these cases, we find the former timid and procrastinating, the latter making too many exploratory operations, or adding to the records of needless operations. Under such circumstances both internist and surgeon are prone to make false deductions from their experiences, and progress in scientific medicine is retarded.

1. Read before the Section on Medicine, Buffalo Academy of Medicine, January 15, 1907.

It is said that from five to thirteen per cent. of people suffer at some time of their lives from gastric ulcer, and in the different authorities, statistics can be quoted of interest from many points of view as to age of patient, location of ulcers, number of ulcers, single or multiple, number in which hemorrhage is a feature, proportion of cases in which perforation or malignancy later develops, and so on. Upon these phases of the subject it is not my purpose to dwell.

Diagnosis of gastric ulcer is not possible in all cases. Hemmeter said at the 1906 meeting of the American Medical Association that diagnosis of gastric ulcer depends largely upon the exercise of the sixth sense. The usual procedure in arriving at diagnosis is by exclusion of other diseases. In many cases of acute or chronic dyspepsia (using the word dyspepsia in a broad sense, including patients suffering from indigestion) regulation laboratory methods, examination of stomach contents and stools, and a close study of the history in the individual case help us with reasonable certainty in the diagnosis of gastric ulcer.

Diagnosis being made, we find prognosis most uncertain. The acute dyspeptic of this week may be a patient with perforating ulcer or acute hemorrhage next week. The acute or chronic dyspeptic of this month may be entirely relieved under proper medical treatment in another month. When the dyspeptic is brought to operation on a diagnosis of ulcer of chronic type, internist and surgeon must realize that there is always an exploratory feature in an operation in suspected cases of gastric ulcer. In my own experience in consultation work, as a result of close study or as a result of exploratory operation, some supposed cases of gastric ulcer were found to be cases of chronic cholecystitis with calculi, some were cases of reflex gastric neurosis due to nephroptosis, chronic appendicitis, chronic pelvic disease, or beginning malignancy. One case diagnosticated as possible gastric ulcer was found to be a massive hydrothorax of the right side with marked downward displacement of the liver.

Hemmeter is working at present to develop a pathognomonic sign of gastric ulcer by x -ray and fluoroscopic findings upon giving bismuth to patients suffering from gastric ulcer. He says there seems to be a peculiar affinity between the exudate in these ulcers and bismuth, the x -ray plainly showing it. It seems to me, however, that in cancer with erosion the same findings would be present.

I had the pleasure of watching Moynihan's work in Leeds for two days last June. In two cases out of four he demonstrated a sign of gastric ulcer the day before he operated upon them. Gently pinching up small areas of skin all over the epigastrium

and adjoining regions between the first finger and thumb he asks the patients to say when the pinching hurts. The pinching is not severe enough to cause pain, excepting over the site of ulcer, which it therefore indicates. Moynihan is not able to give a satisfactory explanation for the occurrence of pain over the site of ulcer elicited in this way, but he offers as a theory to explain the phenomenon, the possibility of a reflex existing between the stomach and the overlying skin area, so that a corresponding skin area of sensitiveness is found over an ulcerated area in the viscus below. On the following day after a clinical discussion of these four cases in the wards of the Leeds General Hospital, Moynihan verified his diagnosis of the site of ulcer in making gastrojejunostomies. In the two cases in which he failed positively to elicit the sign, the house surgeon had previously on the same day developed the sign, and ulcer was found as he predicted. Moynihan's failure to bring out the sign he ascribed to tiring out the reflex, which he finds can be done readily if repeated several times within one day. To determine the obstructive results of gastric ulcer Moynihan makes free use of Seidlitz powder inflation, excepting in cases that have had recent hemorrhages.

From the clinical point of view the surgical treatment of gastric ulcer must be based on a clinical classification of gastric ulcers. The fine distinctions which the pathologist is able to make between the different types of ulcers are not possible at the bedside. It follows, therefore, that when the patient is brought to the operating table, the surgical operation planned for the condition diagnosticated to be present may not be the procedure indicated, and another quite different operation may be demanded by the condition found. In several of my cases the presence of cancer, for instance, has had this effect.

The so-called peptic ulcer, the gastric ulcer beginning to undergo malignant degeneration, traumatic ulcer, the large and small erosions, and the villous or hemorrhagic areas of the pathologist present symptoms so much alike that clinical differential diagnosis can not be made between them. Clinically we base a classification of gastric ulcers on the duration of the disease and the severity of the clinical symptoms, dividing them into acute and chronic ulcers.

The acute ulcer, excepting in the complications of perforation or hemorrhage, belongs to the domain of the internist. The dividing line between acute and chronic ulcers is difficult to draw. The internist who is not liberal enough to consider surgery as a means of relief or often a cure in the treatment of gastric ulcer will lose patients that he ought to save in the long run of his cases. The surgeon who is ready to operate on all

cases presenting some symptoms of gastric ulcer,—for instance hematemesis or melena,—will resort to unnecessary operations and may turn the scale against a patient in certain cases where operation is not indicated.

Chronic ulcer, by which we usually mean to imply the indurated or calloused ulcer due to a process several weeks or months in duration, and as a rule accompanied by the symptoms of chronic dyspepsia, should be transferred by the internist to the surgeon for operative treatment. The indications for operative treatment in this class of ulcers is positive when perforation of the stomach occurs, when hemorrhages are recurrent and large, and when signs and symptoms of obstruction to the gastric out-flow develop. Relapses after improvement or supposed cure constitute a cause for operation. Invalidism due to gastric ulcer and continued underfeeding call for operation because of the lowered vitality which ensues and which invites, in a large percentage of cases, complications that end fatally.

While operative treatment is indicated for frequent and debilitating hemorrhages and also for repetition of one severe hemorrhage, a patient suffering from a single severe hemorrhage is best treated medically. I cite the following history in support of this latter statement, adding as a note of explanation that operative interference at the time I saw the patient would probably have resulted in his death by adding the shock of surgical operation to the threatening collapse of serious hemorrhage. I do not mean to say that a later operation for drainage of the stomach was not indicated; in fact, I so advised.

On April 24, 1905, Dr. Hitzel asked me to see Henry G., a married man 57 years old, who had been a heavy drinker and a large eater. For years he had belching and water brash. In the afternoon of the day I saw him he ate heartily of roast beef and after a long drive during which he was chilled, drank a hot sling. Shortly afterward he vomited a large quantity of blood, and again at 6:30 and at 8 o'clock he vomited blood, one to two pints each time. I saw him about nine in the evening. On examination I found a corpulent man with moderate arteriosclerosis, tender epigastrium; pulse of 120 and weak; temperature $99\frac{1}{2}$. He was blanched. Deciding against operation, he was put upon rectal alimentation, ice and adrenalin internally with morphine subcutaneously. He had no more hemorrhages. A year later, on March 22, 1906, he came to consult me. He said he had no vomiting, no loss of flesh, but had the same symptoms of belching and water brash and dyspepsia. I found pronounced epigastric tenderness and gastric splashing on succussion an hour after his meal. He declined operation. Dr. Hitzel reports that he became worse and entered the General Hospital in October and died there October 20, 1906. Post mortem was not obtained, but he died of general peritonitis a

few days after the onset of typical symptoms of perforation of gastric ulcer. He refused operation, sinking to his death in the fancied security which the morphine he demanded gave him in the relief from pain.

In my own practice the summons to see patients suffering from hematemesis due to gastric ulcer has come as a rule when the patient was so exsanguinated that operation was contraindicated. In fact, some of them were moribund. Several histories of patients in this class might be cited. When operation is undertaken because of recurring hemorrhages, and the ulcer is found after opening the stomach, excision of the ulcer or purse string suture of the area should be made, after which the peritoneal surfaces should be apposed by seromuscular sutures. Following this, with patients in good condition, if the ulcer is so situated that later cicatricial contraction will interfere with gastric mobility and drainage, a gastrojejunostomy should be done. If hemorrhages have not been serious in nature, and the operation is done for ulcer of chronic type, direct attack upon the ulcer to check hemorrhage is not necessary; gastrojejunostomy will suffice according to Moynihan. By drainage, distention of the stomach is overcome and hemorrhage thereupon ceases he argues. Perforation of gastric ulcer may occur in acute ulcer, but is more apt to occur in chronic ulcers.

All authorities are agreed that perforation is an indication for immediate operation. Statistics prove that prognosis, if operation is done within six hours of perforation, is good, but after ten hours the majority of patients die. Moynihan reports twenty-two cases of acute perforation operated upon with eight deaths. Mayo reports seven acute perforations operated upon with two deaths. The disastrous result of acute perforation shows itself first as a local peritonitis, rapidly spreading to become a general suppurative peritonitis. The few cases of perforation in which the local peritonitis is limited by adhesions, or ends in localised abscess, are the exceptions which prove the rule that perforations cause acute general peritonitis and are fatal. When cases of chronic dyspepsia develop sudden onset of violent epigastric pain, quickly diffusing and becoming general abdominal pain, rapidly increasing pulse, frequent respirations and the facial expression of shock with or without vomiting, whether previously treated for gastric ulcer or not, the attending physician should diagnosticate the occurrence of this most serious accident. A case of this type came to me for operation with a diagnosis of acute perforative appendicitis. In these cases sutures of the perforation longitudinally in the wall of the stomach, or transversely if in the region of the pylorus, with pelvic drainage

if general peritonitis has developed, followed by Murphy's continuous salt solution per rectum, and propping the patient in the Fowler's half sitting posture, give the best results. A typical case of this kind came under my observation quite recently, December 17, 1906, in consultation with Dr. Hayd.

Mr. D., 41 years old, a mail clerk, had hematemesis thirteen years ago, and since that time has been a dyspeptic and was treated by Dr. Hayd for dilatation of the stomach by lavage and dieting during last summer. At times in washing out the stomach, vegetables eaten two and three days before the treatment were found in the stomach contents. He declined operative treatment. He improved under the medical treatment, but was constantly on diet, sallow, anemic and emaciated. At one o'clock in the morning of December 17, he was taken with violent abdominal pain without vomiting. A physician was called who gave him a quarter of a grain of morphine hypodermically every hour for three doses. Dr. Hayd saw him at half past eight in the morning and I saw him at nine o'clock. His pulse was 92, small and weak, respiration 36, temperature 97, and taken per rectum 99. He was cyanosed. The abdomen was rigid and tender generally, but most exquisitely tender in the epigastrium and just below the free border of the ribs over the pylorus. The stools did not contain blood. Agreeing in Dr. Hayd's diagnosis of perforating ulcer of the stomach we finally obtained the patient's consent for an operation. I assisted in the operation, which was done at the Deaconess's Hospital at eleven o'clock. Perforating ulcer was found on the upper surface of the lesser curvature of the stomach near the pyloric end. There was dense infiltration and thickening all about the small opening which just admitted a probe. Through this opening fluid material and gas welled from the stomach. A general peritonitis was fully developed and the pelvis was later found full of seropurulent and malodorous fluid. Closure of the ulcer was made by sewing stomach folds longitudinally over it. A posterior gastrojejunostomy was next done. The abdominal wound was then closed. A stab wound of the hypogastrium was made and pelvic drainage established. The patient did well, taking nourishment freely after the fourth day and gained steadily until the ninth day, when evidences of pneumonia were detected. The pneumonic process rapidly increased, and he died on the 11th day.

Exploratory operations are to be recommended in obscure cases presenting gastric dyspeptic symptoms and in which gastric ulcer is suspected on some occasions, and I have previously mentioned in this paper some of the findings. The following two cases I report not because they are cases of gastric ulcer, but because ulcer or a sequela was suspected, and differential diagnosis could not be made.

On April 23, 1900, I saw Mrs. D. with Dr. Wetzel. She said she was sixty-four years old, a widow who had borne several

children. Her health had always been good until a few months before I saw her, when she began having indigestion. At first she treated herself, and then going to a physician was treated for dyspepsia. Her trouble increased, vomiting began and constipation became more and more pronounced. She took food freely, drinking milk in large quantities, and lost but little in weight. Taking food a part of the day, she would vomit the rest of the day. For a few days before I saw her the vomited material was "bad smelling" as she expressed it, and at times was large in quantity, nearly filling a wash basin. While I was present she vomited, and I was able to verify her own description of the amount of fluid vomited and its odor. Her stools were dark and made up of marble-sized lumps.

On examination I found the patient in general good condition without evidence of abdominal tumor, but with pronounced gastric dilatation and splashing on succussion. I operated on April 27, finding a distended, dilated stomach with thin walls and prominent, distended veins. The small intestine from the duodenum down was completely empty and no bigger than a lead pencil. The colon was empty and small. From the pylorus downward a firm dense mass bound down the duodenum and posterior surface of the stomach. I therefore made an anterior gastroenterostomy, using a Murphy button. Operation was readily accomplished, the only difficulty being the control of the fluid which tended to well from the overfull stomach. She recovered quickly after operation and did well for four months, digesting food without trouble. She had one source of worry in which I shared; the Murphy button did not come away. In early September, she began having dyspeptic symptoms again. She lost flesh and in December developed jaundice. A vague tumor could be made out between the navel and free border of ribs at this time. She died January 18, 1901. On post mortem I found cancer involving pylorus and duodenum with metastasis in the liver. The Murphy button had passed from the stomach into the duodenum and was found about three inches from the pyloric end of the stomach where it was stopped by complete occlusion of the duodenum. It had done no harm in this position.

The anterior loop operation is to be regarded as an operation of necessity, when gastroenterostomy is to be performed. It is used when the posterior surface of the stomach cannot be reached.

The following interesting history of another obscure case is reported, diagnosis being made by an exploratory incision:

October 25, 1896, I operated on S. H. at the German Deaconess's Hospital. He gave the following history: He was a married man thirty-two years old; father of four children; family history was good. His health had always been good as a young man. On a few occasions in his youth he had vain-

gloriously shown his ability to chew and swallow glass. Thirteen weeks before I saw him he complained of difficulty in swallowing, and six weeks before he found he could not swallow solid food. From the time he first had trouble until the time I saw him he lost between eight and ten pounds. I passed upon him an esophageal bougie, the bulbous end of which was the size of a twenty-five French sound. Obstruction was met about ten inches from the mouth, I judged at the esophageal junction with stomach. I made therapeutic test of a possible syphilitic stricture at the lower end of the esophagus by giving him iodide of potassium in large doses during the next few weeks. His weight declined quite rapidly, and I failed to pass the smallest bougie sometime in December. In January, I made gastrostomy for this man by Witzel's method to save him from starvation. The operation was quite successful. I found constriction of the esophagus dense and firm at its entry into the stomach, with induration and massive infiltration of the cardiac end of the stomach in the neighborhood. Diagnosis of cancer was made. Within a few weeks he picked up rapidly in flesh on gastric feeding through a tube, and for two months bade fare to regain his former health. He then began to complain of pulmonary symptoms with cough, rapid respiration and later expectoration of mucopurulent character, finally becoming foul and hemorrhagic. He died three months and ten days after the gastrostomy of malignant metastasis of the lungs from the primary carcinoma of the esophageal end of the stomach.

Under the third of the leading indications for surgical treatment of gastric ulcer, that is, under the heading of mechanical interference with motility of the stomach, gastroenterostomy must first be discussed. It is the operation indicated in the majority of cases of ulcer of the stomach. Mayo reports 135 gastrojejunostomies with one death. Acute gastric ulcer may demand it, operation being done for hemorrhage or for perforation, depending upon the site of the ulcer. Chronic ulcer nearly always must be treated this way. In the majority of cases the ulcer is found near the pyloric end of the stomach, and the disturbing consequences of adhesions, induration, infiltration and cicatricial contraction interfere, therefore, with the proper emptying of the cardiac or storage end of the stomach.

Operation of choice is a posterior gastrojejunostomy. Lifting the transverse colon and laying it upward upon the abdomen, the transverse mesocolon is nicked and stretched widely enough to open the lesser cavity of the peritoneum, thus reaching the posterior surface of the stomach. The jejunum is joined to the stomach by a row of seromuscular silk or celluloid sutures. The incision is now made into the stomach and jejunum and is to be an inch and a half to two inches long. Through and through suture of the cut edges is now made so as to appose the edges of

the orifices. Then the ends of the original seromuscular suture which are left eight to ten inches long are picked up and carried on to appose seromuscular surfaces around the point of union. As this operation is now done by Moynihan, Mayo and others, no lateral loop anastomosis between the distal and proximal loops of intestine near the site of the gastrojejunostomy is necessary. By drawing the loop of jejunum out straight and attaching it in direct line to the posterior wall of the stomach with capacious opening, at least two inches long as already indicated, the "vicious circle" of the old operative methods is no longer encountered.

On September 15, 1906, I made this operation on Mr. T., a patient of Dr. Woehnert's. Drainage for pyloric obstruction was the operative indication, developing at the end of four years of dyspepsia, the last three months of which were months of practical starvation. Emaciation was pronounced. The pyloric end of the stomach was involved in a fairly large rounded mass of dense adhesions, about the size of a lemon, and was firmly bound to the under surface of the liver and posterior wall of the abdomen. The mass was not nodular in character. Glandular development was not noticeable. The condition seemed to me inflammatory rather than malignant. I decided against a Rodman's operation, and the conditions were not favorable for a pylorectomy. I made a posterior gastrojejunostomy by Moynihan's method. Upon reaching the posterior surface of the stomach, well away from the pylorus, we found a cicatrix about an inch and a half long, due to old ulcer very plainly visible in that situation. The patient did well after the operation. Writing to me a few weeks ago he said he had gained thirty pounds in flesh and was attending to his business without trouble.

Finney's operation or gastroduodenostomy or a pyloroplasty may be done for benign pyloric stenosis.

I did a pyloroplasty for a patient, Miss G——, Dr. Mead referred to me on October 14, 1903. She said she was 25 years old, had been subject to bilious attacks for eight or nine years, lasting two or three days to a week. She had been careless in eating always, being fond of pie and cake. Her weight at her best was 150 pounds. November 20, 1902, she vomited from five till eight o'clock, and it was thought shee had taken some poison. A week later ulcer of the stomach was diagnosticated, when she vomited blood, and all during the winter of 1902 upon eating she vomited. She lost in weight, falling under one hundred pounds. In April, 1903, she had an attack of jaundice, and on consultation with a surgeon, gall-bladder disease was diagnosticated, it being said gallstones were felt. Operation, however, was refused. She gained in flesh after April and had no more vomiting, but she had constant pain under her ribs and in her right side with cramp-like exacerbations at night which were brought on also by eating meat. I found her weighing 110

pounds, tender over the pyloric end of the stomach and over the region of the gall-bladder with moderate rigidity on pressure. I could not make out a tumor. I operated October 29, finding no evidence of gall-bladder disease, but constriction and hardening of the pyloric end of the stomach. On opening the pylorus longitudinally I found a benign stenosis of the pylorus. Making a free incision about two inches in length, I sewed up the incision laterally, making a pyloroplasty. Her digestion improved promptly and her health was soon restored. She has had no trouble since and is now in good health.

Certain cases of gastric ulcer are favorable ones to do resection of the pylorus with anastomosis between duodenum and stomach. The following unusual case of this kind is worthy of report:

On November 13, 1902, Dr. Crosby referred Mrs. Newman to me, a woman fifty-seven years old, who had had twelve children; menopause over at forty-seven. She had long been a dyspeptic with vomiting, belching and rumbling of gas. For some months she had been losing flesh, in all fifty pounds. She suffered severe cramps after taking food.

On examination, a peristaltic wave of large size could be readily seen in the upper abdomen seemingly in the transverse colon. Cramps occurred with this peristalsis. There was a tumor like an enlarged gall-bladder between the navel and the free border of the ribs. Considering age, loss of flesh and tumor, I made a diagnosis of cancer of the hepatic flexure of the colon, and advised against operation so far as possibility of cure was concerned. I agreed to operate, however, because of the pain associated with the obstructed peristaltis already mentioned. It seemed to me an intestinal anastomosis short circuiting the area of bowel involved might give relief. On November 19, 1902, I operated making an incision as for a gall-bladder operation. The mass mentioned was readily reached and proved to be great omentum and colon, which were readily lifted off and separated from the pyloric end of the stomach, which was found thickened and indurated. Considering this condition one of cancer, I made a pylorectomy, cutting away the mass freely into healthy tissue. She made a good recovery. Gastric dilatation and muscle spasm accounted for the violent colicky pain and peristaltic wave observed through the abdominal wall. Microscopic examination in the cancer laboratory by Dr. Gaylord showed the condition to be one of inflammatory induration due to pyloric ulcer of the stomach. She gained in weight and health until May, 1906, when she began to have return of the obstructive condition already mentioned. In the next few weeks the trouble became acute again. Returning to Buffalo for further operation when I was out of town, Dr. Frederick made a gastrojejunostomy from which she recovered. Considering the mass he found involving the pylorus malignant, he made an unfavorable prognosis

as to cure. By letter, Dr. Crosby informs me she has regained her normal weight and is now well.

I have not encountered a case of "hour glass" stomach in my experience. It is due to cicatricial contraction following ulcer between the cardiac and pyloric ends of the stomach, making sacculation of the stomach on both sides of the contracture or stricture. Stagnation and decomposition of food occur in each pocket. In future cases of this kind I will do the operation suggested by Mayo, resecting the hour glass area, and bringing together the cut edges. To make the cut edges nearly meet, the line of incision on the pyloric side is made slanting and excess of length still present on the cardiac side is taken up as slack, stitch by stitch, the length of stitch on the cardiac side being sufficiently longer each time to take up the excess in the total length of the suturing. It seems to me the most rational way to effect a cure. It removes the diseased area in which malignancy might otherwise later develop and it avoids the danger of insufficient drainage of the pockets, which gastrogastrostomy or single or double gastroenterostomy often invites.

Lastly, the operation of gastroplication may be briefly discussed. It is not a drainage operation and to me it seems its indication is not found in gastric ulcer or its sequelæ. It would be indicated in atonic dilatation if such a thing exists. I can imagine a condition of excessive gastric dilatation due to pyloric stenosis, in which in addition to gastroenterostomy a gastroplication might be indicated.

1018 MAIN STREET.

The Logic of the Situation—The New Pharmacy and the Old.

By WOODBRIDGE HALL BIRCHMORE, M. D., Brooklyn, N. Y.

IT is now some decades, if not scores, of years since the step was taken, and taken by one of the great and highly respected manufacturers of pharmaceutical preparations, which recognised that in buying and selling crude drugs, and manufactured preparations also, the only just criterion of their worth must be their "alkaloidal strength", as it is called, "the strength as determined by the amount of the active ingredient contained," as a circular letter from this firm expressed the idea. This action was at the time a new departure in the trade and it had, as perhaps those who adopted this course intended, the effect of putting on one side, the goods of this house and on the other the articles offered to the trade by all the rest of the manufacturing chemist firms. The step was an advance, and it was a long one: by it was opened the era of the titred or assayed tinctures, an

era of brief duration comparatively but of great importance for it was by the evidence of superiority of method, thus afforded, that the way was paved for the introduction to the medical profession of the alkaloids and alkaloidal salts as legitimate merchandise. It is interesting to consider somewhat in detail the events as they came in sequence, one after another, and to consider some of the important ones, both as conditioned by the past incidents and as conditioning those which followed. Doing this we are really discussing the forces which conditioned the development of a new *materia medica*, a *materia medica* which is proved to be so unlike the old that new theories are required to explain the mysterious problems, in respect to their therapeutic action, which clinical experience provides.

To discuss these questions properly, we must start from a date chronologically not distant, yet in respect to the development of therapeutic art, very long ago. In pharmacy the long period antecedent to this present one may be called the dark ages, and the action of drugs was at this time considered by most physicians to be as mysterious as the causation of disease. Theories of the actions of drugs existed as theories of the causation of disease existed, and these theories in a sense were complements of each other, but the idea that in drugs mysterious substances were to be found, and that these gave to the drugs their "potency" and usefulness, was already discussed and recognised as a logical necessity; and in spite of the fashionable theory that the true explanation of the usefulness of things was discovered by accident, the student entering this field with unbiased mind and pursuing investigation honestly soon sees that the discovery of the alkaloids was as distinctly the result of research guided by logical plans, as was the synthesis of urea from inorganic substances by Wohler.

The question of priority in respect to this discovery of the alkaloids has been discussed from special points of view by a number of specialists, but with the claims of the chemists in regard to this alkaloid or that one we have nothing to do for at the time which we have in mind for consideration, the alkaloids had not yet been seen except in the dreams of certain men. Crude drugs were purchased by men depending upon the personal skill and judgment to aid them in making choice of the proper article. Opium is valued by these buyers, not by the amount of morphine it contains, but according to the opinion of the purchasing "chemist" or dealer, as are all the plants known as simples. Scientific botany is scarce born, but practical botany, as the art of distinguishing species is already pretty well advanced. The names quinine, cinchonine, chinconidine are not yet imagined possibilities, but the physical distinctions between

the various "Peru barks" are already known. Four kinds at least are considered and we read in books of the day of "red," "yellow," "Quito," and "Amazons" bark. That the distinction in the activities of the different species must be caused by difference in the "subtle essence contained therein" none question, but how the essences differ none can say. What these, "subtle essences" may be, many speculate, none know, but that they can be removed from the drug by grinding it fine and extracting the powder with "spirits of wine," that is by using as solvent more or less dilute alcohol, is well, very well, known and has been known from time out of mind.

When governments, for the sake of revenue, not to suppress the trade, began to tax the "distilled spirits of wine" and do so according to its tested strength, a new element is introduced. Historians note how the test is made, but it is as refined as the conditions demand. The relation of strength to specific gravity is next recognised, and the strength of the pharmaceutical spirit is "standardised" so to say. Other improvements are made and after a time some one distils the spirits of wine with "potash," and decides that this is the proper way to do the thing, defines the technique, and then the technique for the manufacture of the tinctures is standardised again with "alcohol" instead of the "spirit of wine."

The menstruum was thus determined and the problem was this much at least simplified, but if pleased with the good fortune in respect to the menstruum the physician, the apothecary, was as much at a loss as ever in respect to the drug which he used. The best he could do was to purchase the very highest grade of raw material and so far as he could determine it, but be as careful as he might, considered medicinally his preparations would vary, and vary much, quite too much in their strength and consequent action upon the patient. That this unforeseeable variation in strength of the various pharmaceutical preparations is the *radix funesta malorum* which gave occasion for the perfectly well-justified hesitation of the physicians in administering remedies none can doubt, and while it hindered the free action of the physician in one direction, it confined his action in all. Did a new sample of opium come to hand, its strength could not be determined almost instantly by assaying the contents for the total alkaloidal strength and total morphine, but the user must carefully make trial of its effects, as if it were a new drug just introduced to professional notice, as indeed it might be considered to be.

Such was the condition of things when the true meaning of the contradictory actions of one special drug—namely, opium, was made clear, or at least was rendered less incomprehensible.

During about a quarter of a century, or such a matter, evidence that substances having definite chemical reactions could be obtained from drugs had been accumulating. But that the action of the drug was the sum of the reactions of a number of constituent alkaloids, and could be expressed in mathematical language, did not come into view until some time afterwards. The ground therefore was ready and the seed was sown, but before the crop could be gathered the plants must grow.

It would be interesting indeed, did space permit, to tell in detail the development from information into knowledge concerning "The Cinchona and its Alkaloids," but the elaborate study under the above title is so easily to be obtained and the book is so admirably written that the obvious course is to refer the reader to it. This fact may be mentioned, that at once the proper method of manufacture was shown to be practical, its commercial development was quite assured, and the story of the development of the secondary alkaloids is essentially part of the history of quinine, of its salts and of the chemists who made it and whom it made.

In respect to the opium alkaloids the tale is by no means so commonplace. For ages it had been known to the physicians that opium usually brought sleep, but any given sample might cause vigil; that almost always it dulled the sense of pain, but it might excite the sense; almost always it quieted spasm, but it had been known to cause convulsion. But when it was discovered that while the morphine content varied greatly, as did the total alkaloids, but not always in the same direction, a clue was at once suggested by which in course of time the puzzling complication has been unwound. In a word, opium contains many alkaloids, glucosides and two acids, and every individual in this complicated group may cause its own reaction variously modifying all the rest.

From the very instant a process of separation into the components was devised, the manufacture of the cinchona alkaloid quinine was begun, and as soon as morphine could be made with certainty, this was the product for which many labored patiently.

The business of the great chemical manufactories began at once, but it did not interfere with the work of the pharmacist on the corner; the business which began to apply the laws of naturel selection here was that of the great manufacturing pharmacists, who were beginning to introduce their lines of assayed extracts and such like. But almost at once these houses saw that by an alliance with the dispensing pharmacist he could be taught to buy not crude drugs but, "concentrated extracts," and by diluting these concentrates with so much alcohol, the U. S. P. fluid extract, or the U. S. P. tinctures could be made. So much did this sys-

tem of "assayed standard concentrates" benefit the retailer that he was able to use this line of goods in filling prescriptions and to sell the standard quality at prices which would not have paid for the raw materials had he sought to "maintain his independence," by continuing to make the tinctures from the official raw materials as these are defined in the pharmacopeia and by its methods.

While the manufacturing pharmacists gave this reason to the dispenser for using their preparations diluted as by directions just noted instead of making the tinctures by percolation from alcohol and the raw drug, they gave quite different reasons to the physicians as an inducement to insist upon the use of assayed preparations, even this one, that these tinctures *always contained* the same amount of the *alkaloids* of the drug in any given dose. That every fluid ounce of the fluid extract contained the same as every other fluid ounce no matter when purchased, because both were *assayed* for their *alkaloidal* strength and were made up to the same titre.

It really does seem a little strange that this circular did not suggest to the physicians and to the chemists (but perhaps it did) and to the drug store man on the corner (perhaps to him also the suggestion came) that in actual fact the value was in the alkaloid, or other proximate principles contained, and not to the miscellaneous impurities of one kind and another associated with the alkaloid, and that the part of wisdom would be to use the alkaloid, and the alkaloid alone as *materia medica*, yet the suggestion does not appear anywhere.

But meanwhile the chemists were steadily at work determining the active principles, the alkaloids and glucosides present in the drugs and as carefully isolating them so that almost before any one really understood what was happening, a new *materia medica* was at the disposal of the physicians. Chemist after chemist has added here one and then another to the list until the active chemical entity in nearly every medicinal plant has been determined and isolated. The meaning of all this work from the physicians' view point is presently to be seen and certain manufacturers begin to put the new *materia medica* into a form in which it can be made useful in practice. The possibilities begin to be the subject of discussion, and for every dose of medicine prescribed, twenty words are used. In this direction the pharmacist sees danger, in that the manufacturing chemist, hence many excited men voiced their views of the situation with tongue and discussed it with pen.

But while much is written and more is said, the volume of words spoken and written comes practically from one group only, because it appears to not a few, that there is no room for argument. The reason for using the chemists' preparations rather

than the pharmacists', appears to be obvious to many, but to a few the idea of the change is distasteful, very; they see in it an unwelcome revolution. But while the chemists are simply preparing for war, the champions of the pharmacists are already beginning to tell the reasons why they are the men who have the right to be and to do and not these "makers of novelties." As if the chemists were in any sense making anything! They are but parting one from another those wonderful compounds which the plants have made, and are giving them singly to the physicians while the pharmacist hands them out all at once in a mixed handful. The pharmacist forgets the assayed tincture which he boasts of using, tells us that it contains all the medicinal qualities of the plant just as nature made (and mixed) them, not artfully parted by the hand of man. Granted that this is true, what then? Does this show that powdered gum opium is to be given in preference to morphia sulphate? By no means, we think. The pharmacist's side is very easily set forth; but he has prejudged his cause long since, when he welcomed the assayed extracts, for by welcoming them he acknowledged the importance of the alkaloid and glucoside, and now he can not avoid the difficulty which his previous acknowledgment has made for him. So now he is up against it, and badly. The alkaloid, the alkaloidal salts, the glucoside is at the hand of the physician, hence this campaign.

The question is easily put by the physician, "You ask me to continue to use the preparations which you make and to cease to use the preparations which come from the chemist.

Now answer me these questions:

1. Is it not fact that the amounts and proportions of the active ingredients in any plant are variable quantities?
2. Is it not a fact that the proportions vary much more relatively than the gross sum of all?
3. Does it now then follow that in making some one ingredient come to the titre you may, and in practice do, add proportions of other ingredients which you do not consider, but which for all you know may be very active?
4. Is it not a fact that in almost every known medicinal plant there are substances utterly useless as medicine, but which make the contents bulk needlessly?
5. Would you consider that a physician was doing his duty if he went to your prescription case and made up powders without using the scales and without noting the contents of the bottles? Or a potion in the same way?
6. Is not the giving of such a preparation as laudanum an exact case in point, since laudanum contains more than a dozen

ingredients which are never twice in the same proportion in any two opium balls and of which the morphine may be anything from five per cent. to twenty-two, the other ingredients varying inversely?

7. Is it not a fact that the *hyosciamus niger* and *albus* have been used more or less in medicine from the very beginning, and that because of the uncertainty of its action the drug has always been counted dangerous?

8. Is it not a fact that the two alkaloids *hyoscyamine* and *hyoscine* have been proved to be perfectly safe and of the most extreme usefulness, the unwished-for complications having been caused wholly by contamination with the great variable content of *atropine*?

9. Is it then not a manifest fact that *if we can* part the active ingredients in any plant from the woody fibre and such like, we ought to do so, hence tinctures; and if we can part the active ingredients from the useless ones and each other, we should do so for the same reason, hence alkaloids?

10. Since the alkaloid is an unvarying substance, and of unvarying action, does it not follow that it is more suitable for medicinal use than a substance about which we know nothing except that it is never twice the same?

11. Is it not a fact that the physician can by using the alkaloidal salts administer a medicine whose action he can predicate as exactly as anything can be predicated with respect to living tissue-reaction?

12. Now since you have answered every one of these questions in the affirmative, please tell me why I should use *anything other than alkaloids* as drugs?"

I can understand that when the substitution of the tiny pellet containing the dose of the alkaloid for the galenical preparations is made everywhere, "the drugstore on the corner" must cease to be the place whence medicines are issued to the patient,—but there are few drug stores which would seriously miss their prescription trade if they lost it,—at least so very many say, and plainly the use of the alkaloids is proved to be the proper course by "The Logic of the Situation."

163 FULTON STREET.

DIABETES MELLITUS.—Tyson advocates oxidising agents, such as arsenic, iron and potassium chlorate, with bathing, massage and outdoor exercises.—*Denver Med. Times*.

Nature, The Good Physician.

By J. D. MACPHERSON, M. D., Akron, N. Y.

VOLUMES have been written by doctors, for doctors and of doctors, but tonight I am going to speak of the silent physician whose voice is never heard, who writes no theses and who tells no lies.

I shall not speak as a champion, for he needs none, but say just a few words to recall to you the presence of the greatest healer earth has ever seen. No gaudy front or gilded sign betrays his presence on the avenue, no clanging bell announces that the doctor is in; no hurrying footsteps, no chattering hoof, tells the quiet neighbors of the urgency of the call. Long before the best trained ambulance corps can reach the scene of emergency, old doctor nature is already there, his vast host of trained assistants laying out his plan of cure.

Where is there a doctor who would so meekly permit a gruff ambulance surgeon to wheel away his patient, patiently watch the ostentatious efforts of the surgeon as with human ingenuity he professes to assist, silently listen to the babble as to the result; then, after badly misdirected efforts of the surgeon who, without even the gratification of remonstrance, would so quietly set about to bridge the error of another?

While the mighty human hands lie still in sleep, this faithful worker patches up the errors of the day. The misplaced bone is deftly calloused in, the surgeons gash must have its pyogenic wall built without a second's wait, and thus the day and night is spent in ceaseless toil to keep the tenement of clay, our human habitation, whole. Let tired nature now but seek a moment of repose, a telegram along some racked nerve reports a microbe undermining some suburban center; perhaps the tonsil is the part which demands his skill, and there soon a battle wages fierce and strong as leukocyte and pkagoeyte unite in deadly strife. The friction of the combat makes the human battle ground so chill and ill that at this juncture Dr. Pills is called in from his slumbers and, hastening to the scene of action, fires in his dose of capsules, pills or gatling hypodermics. Slowly the mighty potion stills alike the friend and foe; then bidding waking ones good night, he returns to his slumbers thanking God for hypodermics.

Doctor, did you ever place your skilful self outside the field of contest long enough to see what nature could do? Do you fully understand that your feeble efforts are simple repetitions of what nature has done a thousand times before? Did you

1. Presidential address delivered at the eighty-sixth annual meeting of the Medical Society of the County of Erie, January 14. 1907.

ever watch nature perform an amputation, a version, plane off a mass of granulations, tie off a tumor, drain a lung abscess, a salpingitis, or a hopeless case of appendicitis? She may finally bring safety after all hope has been abandoned; nevertheless, as the credit is yours, you also overlook a thousand other miraculous conditions which nature cures after you have considered them quite beyond the pale of human aid.

By this little digression from stereotyped lines, I wish to draw your attention closer to nature's methods. In nearly every case she mutely tells us by unerring symptoms when she needs the aid of human hands. Men, like swine, would trample jewels cheaply bought; nature only lets us mine from her storehouse facts as fast as we become educated to appreciate them. She admitted us to the sanctity of the peritoneum only when we knew enough to approach her portals with clean hands; no prayers or incense of the previous century could avail until the rays of microscopic investigation lighted up the scene.

Nature does not want to interfere with our rights. She is the most charitable physician on earth. God pity us if she were not. All she wants or asks of us is intelligent cooperation; she wants us to be on the watch for the line of demarcation, that old line with which we are all familiar in gangrene, and we should be able to locate it in other conditions. As a country physician, perhaps we have been forced too often to strain the danger line from bare necessity; but on the other hand, do not our city compeers quite as frequently err in rushing the patient to a crisis, simply because facilities are at hand?

Abdominal surgery has become such a mine of wealth, its exploitation such a fascination to the would-be surgeon, that the inexperienced hover like a cloud of vultures round the clinic rooms. If some clinical Messiah would drive them from the operating rooms to the field of general practice for a probationary period of at least five years, commercial surgery would become the exception.

We do not wish to be placed upon record as decrying surgery. We appreciate the fact that well-timed surgery is a priceless boon to humanity. Uncalled-for surgery and useless medication, however, both are a tax upon the layman, which the medical profession has no moral right to impose. Nevertheless we are proud to state that the great mass of our profession stands shoulder to shoulder for what represents good government, good ethics, and good common sense. The public is slowly but surely coming to a correct understanding as to when operations are imperative. Five years ago a countryman could hardly be dragged to the operating table for an early appendectomy; nowadays, he often requests it. This comes from education; the

public is not slow to classify results, and in the smaller towns results from a professional standpoint are often obnoxiously apparent.

Preventive medicine as well as preservative surgery are both making desperate efforts to gain their proper foothold in the arena of medical science. Preventive medicine is seen in its best light from the side of sanitary science, whose gigantic strides during the past decade have placed it in the advance guard of cure. By its grand work throughout the state, sanitary science is slowly but surely educating the masses to a correct understanding as to where danger lurks, the secret hiding places of the unseen being pointed out. As the blood upon the lintel told the ancient Jew when the destroying angel was at work, so do our sanitary placards announce to every loyal citizen of the state a statute which it is for his interest to obey.

No crusade has ever been productive of so much good in so short a time as the quiet work of the sanitary officers of the state. The rapid dissemination of printed literature among the masses; the pointing out of the true source of infection; the bringing to the notice of the laity, the possibility of prevention in typhoid and tuberculosis; the mapping out of the entire care of a consumptive, even to the minutest detail, familiarizes the untrained attendant with the means of infection. Instinct alone will teach that dead men do not win battles, as surely as does the doctor know when his patient dies his fee stops. Popular notions are fast becoming relegated to the past; the slighter ailments need some rays from the camera lucida; one gets tired listening to the history of common colds and how they were contracted; a little study of nature's processes would teach a thinking mind how foolish to believe that a draft or exposure to wet or dampness will cause a sickness. Watch yourself during the next coryza you have, noting the tiny burning spot upon the upper floor of the soft palate, also the rapidity of its spread, the general inflammation invading one nostril, then the other; soon the slight rigors, then the bonesache—that's all, the microbe is in. The draft keeps on blowing just the same; having learned the true source of the trouble, up goes your window and God's fresh air fans your fevered brow, and does not come sneaking through the casement crevices or keyhole as it did of yore. This same germ to produce the varieties of so called colds or influenzas has but to change its location or extend its lines, to produce all the different grades of respiratory lesions occurring under that special class.

We often try to picture to ourselves germ life as being legion in kind as well as numbers. This we do not believe to be the case. The same germ working in a different habitat may pro-

duce totally different symptoms; and thus we take it that where germ life has each been reduced to its common denominator, those inimical to human life will be found much fewer in kind than we now suppose. . Nature draws no distinct lines to separate disease into sharply defined classes, but she gives us many warnings by the presence of local lesions which are too often overlooked and which long antedate the fatal issue, but point as truly toward the aftercoming result as the guide board at the country crossroad. . While we do not intend to give any distinct classification of nature's signs, here are a few which might be tacked up as distinctive of the long list: early pulmonary hemorrhages, recurring pleurisy, contracted kidney, nervous dyspepsia with its concomitant mitral lesion, confusion of speech, shuffling gait, hepatic insufficiency, and last but not least. arteriosclerosis,—these all faithfully portray oncoming intrinsic lesion.

While we do not pose as an educator, we wish to reiterate the feeling of a general practitioner that it is our duty to assist nature, not to place ourselves too distinctly in the foreground, but to anticipate nature at every point possible when she needs assistance. She has taught us lessons in promptitude by the manner in which she goes to work to expel the invader; now while eagerly watching for her signs of distress let us not overlook her warning placard, "Hands off." Nature and humanity should work hand in hand, young men and old men laboring side by side; the aggressiveness of youth toned down by the conservatism of age,—age supplying counsel and wisdom, youth, energy, impetuosity and action. The results of this combination has already made the research work of the nineteenth century gleam like a star of the first magnitude against the dark background of the past six hundred years.

Obstruction in the Region of the Pylorus.¹

By THOMAS JAMESON, M. D., Rochester, N. Y.

THE knowledge of the pathology of all abdominal lesions has been greatly aided by the observation of the surgeon who has enabled us to know what is actually going on in the body during life. How little would we know today of the different forms and stages of appendicular disease if we had to depend entirely upon post-mortem observation. We are now just beginning to learn in the same manner the changes due to pathological conditions in the region of the pylorus and are thereby

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York, at Syracuse, October 16, 1906.

enabled to judge more intelligently of the relation of symptoms to the pathological lesions causing them.

When we think of pyloric obstruction, the picture that is before one's mind is of more or less complete obstruction with a dilated stomach and so forth, but long before this stage is reached, certain symptoms develop which I wish to discuss for a few moments. Works on the diseases of the stomach divide pyloric obstruction into two divisions,—Functional and Organic. Under the head of "Functional" is spasm of the pylorus. That is a sudden, tetanic contraction of the pylorus lasting during a long period and then suddenly relaxing; affording a complete relief to the symptoms.

The most common causes of pyloric spasm are ulcer, commencing cancer or the irritation produced by the presence of gall stones or of gall bladder disease. It also occurs in hypersthenic gastritis and in some conditions associated with hyperchlorhydria. The most common symptom is gastric flatulency; the gases accumulate in the stomach and are gotten rid of by belching or by the sudden relaxation of the pylorus, allowing them to pass into the intestines or in severe cases, by vomiting. There is no distress in the stomach when it is empty.

When we consider that the pylorus is physiologically a sphincter and that its function is to protect the intestines on one side from a too rapid passage of the contents of the stomach and to protect the stomach on the other, from regurgitation of bile and intestinal contents, we realize how irritation on either side of the sphincter will produce spasmodic closure.

There is another sphincter equally important which lies in the duodenum just below the entrance of the bile and pancreatic ducts. This sphincter has been demonstrated by Ochsner, of Chicago, (*Annals of Surgery*, January, 1906), and has frequently been observed by him in a stage of firm contraction. The presence of this sphincter throws an important light on certain symptoms often observed in obstruction in the neighborhood of the pylorus and helps us to distinguish between spasmodic obstruction due to the presence of an ulcer or other irritation in the region of the pylorus and one in the region of the duodenum.

If bile is present in the first few mouthfuls of vomitus, it rather points to the focus of irritation being below the region of the bile ducts and is most likely due to ulcer in the duodenum, or to a stone in the ampulla of Vater.

Too often patients drift from one doctor's office to another with symptoms which point strongly to pyloric spasm and are treated for "dyspepsia," "indigestion," and "liver trouble," without once having had a thorough examination and an analysis of

the stomach contents or any persistent effort being made to discern their real condition.

Let me describe an illustrative case: Mrs. L.—, aged fifty; a German woman, who has suffered for years with distress after eating, eructations of gas, occasional attacks of alimentary vomiting. No history of jaundice. She had consulted many men for relief and had been under the care of a very competent physician who has devoted considerable time to the study and treatment of stomach lesions. He had given her test breakfasts and prescribed a diet which resulted in partial relief. During one of her attacks of pyloric spasm and vomiting, she consulted Dr. George S. Burns of Rochester. He made a diagnosis of gall bladder disease and asked me to see the patient with him. When we explained to her what we thought her attacks were due to, she readily consented to an operation which the writer performed at St. Mary's Hospital, and found a large gallstone at the junction of the cystic and common ducts. It was readily removed by milking it back into the gall bladder which was drained. This patient's symptoms were so strongly suggestive of pyloric obstruction of an organic nature, that I made all preparations to do a partial gastrectomy if it were necessary.

There is another form of intermittent pyloric obstruction which is due to adhesions to surrounding organs or to the malposition of the pylorus. I had a case illustrating this about eight years ago. A young man aged 28 complained of intense distress after eating a hearty meal, often followed by severe vomiting, but if he restricted himself to a liquid diet or would only eat very light meals and eat often, he would have no distress whatever. On an exploratory incision, I found the fundus of the gall bladder firmly adhered to the greater curvature of the stomach, near the pylorus, in such a way that if the stomach was at all distended it not only caused a bending and narrowing of the pylorus, but also sharply distorted the cystic duct. Sewing the gall bladder up in place completely relieved all his symptoms.

I could mention many similar cases did time permit or if it would serve any good purpose, but here let me urge the necessity of giving our chronic stomach cases more particular attention. Have the stomach contents examined; make a careful physical examination of every patient complaining of stomach symptoms and one will be surprised how often one will come across distinct pathological lesions.

In obstruction due to organic changes in the pylorus it is important to recognise that obstruction exists in the early stages. Whether that is due to commencing cancer or to the cicatricial contraction of an old ulcer, or to that form of benign cellulomuscular hypertrophy, which often results from chronic hyper-

sthenic gastritis. Pyloric obstruction as a rule, develops slowly and goes through three well marked stages,—the periods of compensation, stagnation and retention.

The degree of compensation depends on the rapidity of the formation of the obstruction and the power of the muscle of the stomach wall to hypertrophy. The stomach wall, in slowly developing stenosis, may more than double the normal thickness. This is much more marked in the region of the pylorus. When we have a patient who habitually suffers from very great stomach disturbances by dietetic excesses, especially the eating of large quantities of coarse food and if that patient can eat and comfortably digest a small meal that is finely subdivided by proper preparation and thorough mastication, it is more than likely that that patient is in the first stages of pyloric obstruction.

In this stage the stomach can be felt periodically contracting during digestion. Fluids are more readily evacuated than solids. All these characteristics are absent in myasthenia with which pyloric obstruction is often confounded. The duration of this stage depends on the nature of the obstruction, being a question of years in benign obstruction or a moderate cicatricial stenosis, or of a very short time in carcinoma.

In the period of stagnation, we find the muscle of the stomach wall beginning to get tired of the effort to force the food past the obstruction. It empties itself slowly but never contains food in the morning before breakfast. There often is rebellious vomiting during this period from the irritation of the fermenting contents. Pain, sometimes very severe, is likely to be a symptom of the stagnation, although there may not be much loss of weight at this time. The third period of retention is characterized by the failure of the stomach to evacuate its contents at any time during the twenty-four hours, and by copious vomiting of accumulated foods. The symptoms due to the absorption of an insufficient quantity of nutriment and water are combined with those of gastric autointoxication. Emaciation and loss of strength, may be very great, the patient becoming cachectic, and unless relieved by operative measures death results.

The patient whose stomach I have here, was a man forty years old, who had had stomach symptoms of gradually increasing obstruction for the past four years. During that period he was under the care of several different physicians and was dosed with stomach remedies ad nauseam. During the three or four years of his sickness, he never had a physical examination, nor a test breakfast, but was told by two physicians that he had cancer of the stomach and that he could not get well. He finally came under the care of Dr. M. M. Talpin of Rochester, who made a diagnosis of pyloric obstruction and asked me to see him.

I found a man extremely thin and yet able to be up around the house, who complained of distress after eating, gas, and vomiting. He would go two days without vomiting and then vomit all he had eaten for that period, the vomitus often half-filling a slop jar. Dr. William Ewers kindly examined the stomach contents for me. The capacity of the stomach was over a gallon and the greater curvature when distended with fluid could be readily seen through the thin abdominal walls lying just above the symphysis pubis. Dr. Ewers made a diagnosis of benign stricture of the pylorus. On this being explained to the patient he readily gave his consent to an operation. At the operation, which was performed at the Rochester City Hospital, we found a firm stricture of the pylorus and also that the pyloric region was firmly attached to the pancreas. The patient's condition on the table was very poor indeed and it was considered best to do a rapid posterior gastroenterostomy for immediate relief, which was done. The patient rallied well from the operation and was able to take liquid diet on the third day; but the intestines were unable to absorb any nourishment given him, on account probably of atrophy of the intestinal lacteals and absorptive glands. He died of inanition on the eighth day after operation, practically starving to death. How much better this man's chance would have been if he had had surgical aid before the stage of emaciation.

Examination of the specimen shows no malignancy and there is no doubt that he would have recovered if the anastomosis had been done in time. There was no leaking at the line of anastomosis and no evidence of peritonitis. In obstruction due to malignant disease, the clinical picture is very similar, except that the various stages are much shorter and there is much more rapid loss of strength. Yet even in these cases partial gastrectomy if done early will save a fair proportion of them and an ever increasing proportion as the profession comes to realize that early cases can and are being cured if surgery be given a fair chance.

I saw a woman, aged seventy, in excellent general condition, who gave a history of stomach trouble commencing only last February and who had been under a physician's care in a small town almost ever since, and yet her physician had never given her any kind of an examination and finally advised her to seek advice in Rochester. On examination, I found a distinct mass in the region of the pylorus. The mass was freely movable; complete obstruction existed. The patient was unable to retain even the white of an egg. I advised an exploratory incision and the patient had the day set for the operation, when she suddenly changed her mind and I was discharged from the case.

She lived only two weeks and I have every reason to believe, starved to death.

I have not attempted to give the differential diagnosis of the various forms of obstruction in the region of the pylorus, for they can be readily found in any good textbook on the stomach, but I wish to caution against a slavish adherence to mere stomach analysis without regard to the clinical history. If one waits, for instance, until a case of carcinoma of the stomach can be fully demonstrated, by the absence of hydrochloric acid and the presence of the *Boas bacillus* and so forth, it will usually be too late for operative interference to be of any permanent value. I am not urging indiscriminate operating in stomach diseases; far from it: but I do say, that many cases go to an early grave or else are dragging on a miserable existence that might be cured by intelligent and competent surgery.

346 WEST AVENUE.

The Visions of Mary Czajka.¹

BY F. E. FRONCZAK, A. M., M. D., Buffalo, N. Y.

ON May 23 1906, the inhabitants of Buffalo were startled by the news that a great prophetess and seeress was among them—one who was able not only to foretell the future, explain the past, but also to be in communion with the saints and God himself. On the afternoon of that day, a rumor was spread through East Buffalo that on the following day, a young girl would communicate with the Blessed Virgin and the saints and tell the people at large what are the wishes of heaven in regard to certain things to be done. On the following morning, promptly at 10 o'clock, as foretold, I received a message that a young girl was stiffened in a room and was talking with saints. I was asked to come in my professional capacity to examine her. I hurried there and found the street in front of the house, crowded with people. I could not get into the house as it was packed. Finally, after much struggle, I obtained entrance and there I saw, sitting in a chair, quite a handsome young Polish girl, aged 17 years; her hands extended; her eyes closed; anemic in appearance.

I tried to speak to her, but at that time she began to speak softly, repeating what were supposed to be the words of the Blessed Virgin to her. I examined her. She was perfectly stiff. I used all the force I could, but could not bend her hands or elbows; reflexes none; pupils widely dilated; insensitive to touch. I pricked her with needles and applied electricity to various parts

1. Read at the annual meeting of Medical Society of the State of New York, January 30, 1907.

of her body. She smiled, saying softly and pleasantly that the devil who was torturing her would drop head if he did not stop. "The Blessed Virgin," she said, "told me that unless the doctor" (and she seemed to know who I was, though I could see that her eyes were closed and insensitive to light) "would turn as black as the stove" and then she kept on speaking the following words: "The Blessed Virgin says that great earthquakes are coming; that thousands of people will be killed; the Blessed Virgin says that the world is getting worse and worse; that God will punish the whole world with fire, war, earthquake and diseases; the Blessed Virgin says she will strike Dr. Fronczak dead unless he stops burning me."

At that moment, I was testing the reaction of her pupils with a lighted match. She murmured, sighed and came to; she looked around bewildered. The people in the rooms, who had been upon their knees, arose and began to kiss her hands, her dress, and her feet, and to call upon the saints,—looking upon me as upon the very devil, and here and there muttering words of condemnation upon my head. When she came to, I examined her thoroughly. Aside from her anemic appearance, she seemed to be perfectly well. She had menstruated regularly for the past two or three years. She read the bible, attended church formerly, "but stopped because the priests were bad."

She told me that at 2 o'clock that same day she would have another vision. I requested Drs. William C. Krauss and James W. Putnam, nervous disease specialists, to join me in examining the young girl. They did so, but could find nothing pathological about her. She went through the same form of stiffening, and repeating almost all her former sayings.

Somebody told us that her brother, who was a tall, large man, seemed to influence her. He was 6 ft., 3 in. in height and weighed about 250 lbs., with leonine head, bushy hair and piercing eye. While she was in this semicomatose state, we watched her brother. We noticed that his lips were moving and with the movements of his lips the girl spoke. We requested this man to leave the room. The moment he did so, the girl came to. We called him in and the girl fell in her former semicomatose state. We charged him with hypnotizing the girl, which charge he denied. However, we learned that he formerly took lessons in hypnotism. After consultation, we told the people that the girl was not a saint, but was simply suffering from exaggerated hysteria; was hypnotized and spoke only on the suggestion of her brother. Some of the people turned upon the three physicians present and abused us. Dr. Krauss then proposed that the girl submit to him and that he should

hypnotize her. After proceeding for a minute with the movements of his hands on the girl's forehead and suggesting to her that she fall asleep, the people, at first, and then the girl herself refused to have any experiments made upon our seeress. We told the people then that the whole affair was a fake. Many believed us and left the house immediately.

We notified the police who dispersed the crowd from the house. The press took up this matter and after telling the astonished citizens of Buffalo about the visions of the prophetess also began to throw cold water upon the whole affair and in a few days it quieted down. The surprising fact of this was first, the influence of the big brother upon this innocent, simple minded girl; second, the ease with which the populace believes in certain so-called supernatural visions; third and most surprising; is the idea that many so-called intelligent and highly educated women from the uptown district of Buffalo came in carriages and gave money for a chapel to be erected on that spot, and believed, with all the simple mindedness of the ignorant people, that this was a supernatural gift.

At present, after the exposure of the whole affair and explanation that it was exaggerated hysteria,—hypnotism and suggestion,—the house has been almost deserted. Only occasionally, usually on Sundays, a few simple minded folk come to the girl's house, pay twenty-five cents admission and listen to the always same repeated talk of the poor hysterical girl. And thus another seeress was exposed by medical procedure.

806 FILLMORE AVENUE.

UTERINE CANCER AND PREGNANCY.—Vaginal hysterectomy or Cesarean section is recommended by Scheib (*Prager medicinische Wochenschrift*, No. 39, 1906), who has used the method four times.

The womb should be removed as soon as the condition is discovered, not waiting until the child is viable. During pregnancy the operation of hysterectomy per vaginam is easier than at other times. In these cases there is always danger of infecting the peritoneum if the abdominal route is followed. It is probably easier to make a complete operation through the vagina than through the abdomen. The vaginal route is preferred by the author whenever it is possible.—*Therapeutic Gazette*, February, 1907.

The Doctor—No; I don't know of any treatment that will cure a case of "exaggerated ego."

The Professor—And you a doctor! I've seen many a cure effected by homeopathic treatment—give the man affected with the exaggerated ego a swollen eye.—*Chicago Tribune*.

SPECIAL ARTICLE—SELECTED.

The Surgical and Serum Treatment of Puerperal Sepsis.

By LEWIS S. McMURTRY, A. M., M. D., Louisville, Ky.

(From the British Medical Journal of November 3, 1906.)

IN 1880, Pasteur, assisted by Doléris, demonstrated by cultures from cases of puerperal sepsis that streptococci were the usual infectious agents in this disease, and, by further researches, that staphylococci, and, in some cases, certain bacilli were also agents of infection. The discoveries of Lister and the development of bacteriology soon confirmed beyond question Pasteur's researches, clarified the misty atmosphere of theory and hypothesis which had so long enveloped the pathology of "puerperal fever," and established the fact, announced in 1861 by Semmelweis, that puerperal infection is identical with other wound infection. The practical results which followed the application of the Listerian surgical technique in obstetrical practice, especially in lying-in hospitals (hitherto the hotbeds of puerperal infection), were so positive and convincing that the most sceptical were persuaded, and these marvelous discoveries received acceptance generally. Every student of this subject is familiar with the names of Bumm, Winckel, Recklinghausen, Bar, Waldeyer, Kroenig, Doederlein, and others who have labored so faithfully and effectively in establishing upon a scientific basis the modern system of obstetric practice.

PATHOLOGY.

Puerperal infection and wound infection generally are identical in origin and character, the former modified only by the anatomical relations of the wounded area, the parturient tract. Puerperal infection is contact-infection, the germs, with rare exceptions, being brought to the wounded area from without.

The organisms most commonly concerned in puerperal infection are the pyogenic bacteria so familiar in wound infection in other parts of the organism—the streptococcus and the staphylococcus. While the *bacillus coli communis*, the gonococcus, and the diphtheria bacillus are sometimes agents of infection, the familiar pyogenic organisms mentioned are the active infecting agents in the great majority of cases. The streptococcus is the cause of the severe and rapidly-fatal form of puerperal infection. Mixed infection, where two or three distinct organisms are found, is not a rare condition.

In puerperal infection the organisms invade the tissues and are diffused by means of the lymphatics and bloodvessels. The

1. Read by invitation, before the Section of Gynecology of the British Medical Association at Toronto, August 28, 1906.

extent of this invasion may be circumscribed, so that the involved area may be quite limited and the process become localised. This is more common when the infecting organism is the staphylococcus. The diffusion may be accomplished very rapidly and the entire system overwhelmed by the rapidly-multiplying organisms and associated toxins without any limitation or localisation. This severe form of infection is usually caused by the streptococcus.

The invasion of the wounded generative tract by putrefactive organisms, which do not enter the blood current but poison the system with toxins evolved, is a special form of puerperal infection known as "sapremia." The character of this infection is so distinct, both as to the organisms engaged and the toxemia produced that it should not be confounded in this consideration with the other forms of puerperal infection.

While a wound of any portion of the generative tract may afford a port of entry for infective germs, the usual site of invasion is the lining membrane of the uterus. The endometrium immediately after labor presents torn and bleeding surfaces, gaping placental sinuses newly thrombosed, and extensive vascular areas for absorption. Indeed, nature offers here an ideal culture-bed for the propagation of germ life.

In this form of endometritis the area of infection may be limited, or it may involve the entire mucous surface of the uterus. When the infection is caused by putrefactive germs, the endometrium is covered with necrotic material from which comes a foul and offensive discharge, often containing gas. An extensive invasion of the endometrium by pyogenic organisms often begets necrosis by the very intensity of infection, producing a sloughing and offensive discharge. In cases of severe infection by the streptococcus, also by the staphylococcus, there is usually no offensive odor, and the surface of the endometrium may be quite smooth, with no extensive lesions of entry. Indeed, the invasion of the endometrium by the most intense organisms, producing the most severe type of systemic infection, begets local lesions that are slight, while the lesions accompanying the ingress of putrefactive organisms, and pus-organisms of diminished virulence, are more extensive, and thereby attest the localisation of germ activity. The lymphatics so liberally distributed throughout the uterus afford the avenues of rapid extension from the endometrium. It is most pertinent in this connection to review the clinical and pathological studies of Bumm and Doederlein, showing the histological variation between cases of ordinary septic infection and cases of virulent infection. In cases wherein the pyogenic organisms are of minor degree of virulence the uterine mucosa is covered with necrotic material and large num-

bers of micro-organisms are embedded deeply in the membrane. Beneath is found a dense layer of cell infiltration, forming a barrier which excludes the septic organisms from further invasion. The importance of preserving this wall of defense will be referred to later in connection with certain methods of surgical treatment.

The researches of Bumm also demonstrated that in cases of septic infection wherein the micro-organisms are most virulent, the wall of cell infiltration just described is altogether absent or very imperfectly developed. In such cases the evidences of endometritis and metritis will be slight, the uterine mucosa will be found smooth and clean, and the process of invasion is so easy and rapid that tissue resistance, either in the mucosa or beneath it, has not had time for development.

As already stated, the extension of infection from the endometrium is through the lymphatics, though the veins are also routes of invasion. Pyemia usually begins with infection of thrombi at the placental site, followed by inflammatory changes in the uterine and pelvic veins. The infecting organisms rapidly make their way from the uterine mucosa to the serous surface of the uterus, giving rise to peritonitis. The route is by means of the vessels, especially the lymphatics, and seldom by continuity of surface through the Fallopian tubes. Having reached the peritoneum, diffusion along lymph channels is boundless. The blood becomes poisoned and the entire system may be overwhelmed.

SURGICAL TREATMENT.

With this outline of the pathological process underlying puerperal sepsis before us, we can now intelligently consider the surgical treatment of this disease. From what has preceded, it is apparent that such treatment to be effective must be applied while the infection is limited to the uterus, and, for safe procedure, to the uterine mucosa (endometritis). Hence the question of accurate diagnosis becomes a question of most vital and essential importance.

Just as soon as possible after the initial chill and rising temperature the uterus should be carefully explored, observing all necessary antiseptic precautions. Whitridge Williams recommends that sufficient of the lochia be removed for bacteriological examination, a suggestion which will prove valuable when it is practicable to do so. With the index finger the uterus should be carefully explored, and a bimanual examination will determine the mobility of the uterus and the condition of the appendages. If the examining finger discloses a smooth endometrium, free from disintegrated tissue, it will be appropriate to give an intra-

uterine douche of warm boiled water or sterilised salt solution. This douche should be administered by the surgeon, and with careful observance of the aseptic surgical technique. If the cavity of the uterus be filled with debris, already detected by the examining finger, an effort should be made to loosen and remove the same with the finger, afterwards applying the intrauterine douche of warm saline solution. If this procedure does not suffice to clear away the debris from the infected endometrium, we must consider a resort to the curette.

The routine use of the curette in puerperal sepsis, which is advocated by many surgeons, is both irrational and harmful. The pathological condition shows that in the most virulent type of puerperal infection the endometrium presents nothing to be removed by the curette, while its application will, by breaking through the limiting wall of leukocytes, and diffusing infective germs throughout the invaded tissues, prove most disastrous. The curette should be employed only in those cases where debris is found in the uterus, which can not be satisfactorily removed by the finger and saline douche. Its application should be followed by an intrauterine douche of warm saline solution. The inefficiency of the bichloride of mercury and carbolic acid solution has been so amply demonstrated clinically, to say nothing of their well known toxic effects, that they should be discarded entirely from intrauterine treatment. The experiments of Bumm have shown that the infecting organisms penetrate the tissues with great rapidity, and in the most virulent type of puerperal infection they have entered the uterine structures beyond the reach of bichloride injections or the curette when the initial chill marks the advancing infection. I can recall numerous cases I have seen both in hospital and private practice in which the infection advanced with increased intensity immediately after the use of the curette; whereas the curative results of curettage and douching in cases of sapremia and localised infection are most prompt and gratifying.

The operative treatment of puerperal sepsis has assumed a conspicuous place in obstetrical and gynecological literature of recent years. The existence of infected Fallopian tubes, as a complication of labor or as a sequel of puerperal infection, and their treatment by radical surgical intervention, have long been recognised by gynecologists and need not detain us at this time. The surgical treatment of parametric abscesses and inflammatory exudate, which occur usually late in the puerperium, is likewise established upon a practical basis generally known and accepted. But it is quite different as to the question of hysterectomy as a curative procedure in the early stage of infection. This subject

affords a field for active discussion and much diversity of opinion. It would appear most rational that in cases of virulent infection, especially by the streptococcus, marked as it is by severe mortality, the infected uterus should be removed while the infection is limited to that organ.

That hysterectomy has a place in the treatment of puerperal infection is attested by numerous authentic cases. It is the special aim of this paper to show that the scope of this operation is restricted, and to point out the limitations which necessarily prevent its wide application. Some twelve years ago I reported a case of putrid endometritis (puerperal) in which the disease involved the deep structures of the uterus despite the treatment observed, in which I resorted to hysterectomy with prompt cure of the patient. Since that time I have seen two cases of puerperal infection in which the patients were very ill, and the process was limited to the uterus. In both cases hysterectomy was done and followed by recovery. In both cases the uterine wall was the site of multiple abscesses. During this period I have seen many cases, but the three mentioned are the only cases in which I have felt justified in resorting to hysterectomy. I think my experience may be taken as that of the average surgeon engaged in special work, and may be regarded as a fair index of the restricted field for hysterectomy in the treatment of puerperal sepsis. It will be noted that in these cases operation was not undertaken in the initial stage of the disease to prevent extension of infection, but at a later stage and on account of structural changes in the uterus.

As already stated, in the virulent type of this disease, when the initial chill and rise of temperature occur, the infection has usually extended beyond the uterus. Our means of diagnosis are not so perfected that it is possible to determine the character and intensity of the infection sufficiently early to decide the important question of hysterectomy. In other words, if we resort to hysterectomy sufficiently early to arrest the disease, we subject many patients unnecessarily to a major operation; and if we defer operative intervention until the virulence of the disease is manifest, the operation will avail nothing. It is this inability to determine in the very inception of the disease (at which time alone hysterectomy will prevent extension) the character of the infection and the resistance of the invaded tissues which prevents resort to this operation. From a careful study of this subject it is apparent that, with our present means of diagnosis and prognosis, hysterectomy has no place in the initial stage of puerperal infection with a view to removing the focus of infection; and that its only proper scope is in the later stages, when the uterus

has undergone pathological changes in consequence of being the storm centre, as it were, of the infecting process.

Another operative procedure which has been recommended and practised in cases of severe puerperal sepsis consists of vaginal incision and the application of antiseptic agents, preferably iodoform, to the peritoneal surfaces adjacent to the uterus. From our knowledge as to the rapid extension of the infecting process, and the superficial effect and toxic properties of the antiseptic agents used, this treatment does not appeal to favorable consideration. Its practical application has not won for it a place in the treatment of this disease.

In 1895, Marmorek introduced into the treatment of puerperal sepsis his antistreptococcic serum. By growing streptococci in human blood serum and agar, and increasing its virulence by repeated inoculation in animals, he obtained a culture of great virulence, which, by injecting into immune animals, enabled him to produce a serum claimed to be both preventive and curative. Since that time, antistreptococcic serum has been applied to the treatment of puerperal sepsis very generally throughout the world. In 1899, a committee of the American Gynecological Society made an exhaustive study of the subject, including all the cases reported up to that time. This committee made an elaborate report with the conclusion that, while the antistreptococcic serum was practically harmless, there was no evidence that it exerted a curative effect upon puerperal infection. While I have not used the serum in the treatment of this disease, I have seen it applied in numerous cases by my colleagues, and in every instance without perceptible benefit.

In order that I might present a fair estimate of the way in which this method of treatment is regarded at this time, I have requested a statement from three representative gynecologists whose clinical studies especially fit them for such consideration.

Dr. J. Whitridge Williams, of Baltimore, who was Chairman of the American Gynecological Society's Committee for the investigation of this subject, in a personal communication under date of July 20, 1906, writes:

"In the last few years renewed attention has been directed to the subject, and numerous articles have appeared from Aronsohn, Tavel, Menser, and others, which apparently show that the serum may be of value prophylactically, or in the early stages of infection, but that it is practically useless when the process has become well established. Moreover, it does not act as an antitoxin like the antidiphtheritic serum, but exerts its effect merely by stimulating the leukocytes to take up bacteria, thus increasing the opsonic power of the blood. For this reason it does not

seem to me that it possesses any practical value, especially when applied after the infection has become well developed."

Dr. J. Clarence Webster, of Chicago, under date of July 21, 1906, says:

"Accurate studies of many cases by skilled observers make it evident that no better results have attended the use of the serum that have followed other methods of treatment. I have entirely abandoned its use."

Dr. Barton C. Hirst, of Philadelphia, writing on July 25, 1906, says:

"During the past year I have employed the serum in the treatment of fourteen cases of severe streptococcic infection demonstrated by blood cultures. In three cases the success was satisfactory, but in the remainder of the series the result was uncertain or entirely unsuccessful."

CONCLUSIONS.

From a careful study of the subject under consideration, it is apparent that the best results follow the simplest treatment, avoiding radical surgical intervention and facilitating drainage and elimination.

That cleansing the uterine cavity by irrigation should be given preference over curettage whenever practicable.

That on account of our inability to accurately measure the character of infection and the extent of tissue invasion in the early stage of puerperal sepsis, hysterectomy as an abortive measure of treatment is impracticable.

That antistreptococcic serum is without value in the treatment of this disease.

That puerperal infection being identical with ordinary wound infection should be considered from the standpoint of prophylaxis, and as sepsis has been eliminated from modern operative surgery, so should puerperal sepsis be reduced to the surgical standard by the application of refined surgical technique.

THE PRESERVATION OF HEARING.—W. Sohler Bryant states that the changes which affect the hearing most insidiously are of two kinds: those chiefly inflammatory and those chiefly due to defective ventilation; in either case the end results are much the same. Decrease of sound perception is the most delicate measure of general nervous exhaustion. The writer believes that early observation will detect insidious conditions which cause over 95 per cent. of deafness, and that judicious treatment will cure these conditions before serious impairment of hearing has taken place. He suggests that the otologist should be consulted once a year, after every cold, and whenever anything unfavorable is noticed in the ear.—*Medical Record*, March 2, 1907.

ABSTRACTS.

Treatment of Arteriosclerosis.

LUDWIG WEIL, Stuttgart, has made extensive clinico-therapeutic studies of arteriosclerosis (*Medicin. Correspondenz-Blatt d. Wuerttemb. aerztl. Landesverein.* Sept. 15, 1906). He concludes that the calcium-free diet as also the administration of acids, in order to decalcify the vessels, is useless and injurious. His experimentation shows that in arteriosclerosis the blood and the tissues are impoverished of salts as has been asserted by Trunecek. This is all the more striking because the blood is otherwise entirely normal. The nitrogen retention is not increased, so that the excretory power of the organism seems unimpaired and the solid contents of the blood and with it probably the viscosity are quite high, while specific gravity appears normal.

The arteriosclerotic excretes too much chlorine and there is often a considerable diminution in lime and magnesium, some diminution in the phosphates, and a small increase in ammonia and acidity. The blood contains little chlorides, the urine a great deal.

The best treatment consists in the administration of a mixture of salts corresponding as nearly as possible to the salt of the blood. From this mixture the body abstracts what it can use. Such a mixture he considers antisclerosin, with which his results were indubitably good. Iodides, diuretin, and similar preparations, are of course not rendered superfluous by its use. A sudden overwhelming of the body with the salts is only rarely of benefit; there often follows catharsis and general indisposition. He therefore prefers the gradual insinuation of the medicament. His procedure is to give an antisclerosin tablet twice daily for three days, then thrice daily for a further three days, and then in corresponding intervals increases the daily quantity to four, five and six tablets.

Dr. O. Burwinkel, Nauheim and San Remo, (*Deutsche Aerzte-Zeitung*, Aug. 15, 1905), writes on the pathogenesis and therapy of arteriosclerosis. He refers to Trunecek's serum, which consists of the inorganic blood salts and which Tessier, Levy and Goldschmidt used with success. As the subcutaneous injection is exceedingly painful, he uses the antisclerosin tablets made by Natterer. He believes that in some cases he has seen benefit from it, especially with regard to the severity of the anginous difficulties.

The Treatment of Hemorrhoids.

M. R. DINKELSPIEL, in a paper on "The Medicinal Treatment of Hemorrhoids without Surgical Intervention" (*Therapeutic Medi-*

cine, January 1907), says that he regards non-operative treatment indicated in incipient forms, when the hemorrhoids are secondary to other disease, as hepatic cirrhosis, tumors, and the like, and when the hemorrhoids occur in aged individuals who cannot safely undergo operation. Constipation is a most potent cause, and it must be cured; the defecations being so arranged that they occur at night, as the subsequent rest relieves engorgement.

Locally, cleanliness is of primary importance; the parts should be washed with witchhazel solution, of which 1 or 2 ounces may also be injected into the rectum. Of late he uses the bismuth iodoresorcinulphonate suppositories (anusoil), which relieve the congestion and inflammation and liquefy the feces. When there also exists external inflammation, he slightly warms a suppository and gently anoints the parts. Under this treatment he has seen many cases recover without recurrence.

TREATMENT OF ALCOHOLIC HEPATITIS.

DR. FRED C. THUM, Louisville, writes on "Subacute Alcoholic Hepatitis" (*Medical Progress*, February 1907) and describes it as a form intermediate between the acute hepatitis from a single protracted spree and chronic hepatitis from long years of alcoholic excess. Calomel, podophyllin, and similar drugs are not of very great use. Strikingly effective are pills consisting of salicylic acid, acid sodium oleate, phenolphthalein and menthol (pro-bilin). They increase biliary secretion and render the bile sterile, thus inhibiting the inflammation in the hepatic structures.

Collargolum in Surgery.

IN his work on the Russo-Japanese war, von Oettingen describes a new method of wound dressing which he employed in thousands of cases. He and his colleagues in the field hospital never attempted to cleanse the wounds; they painted the surrounding area with a solution of mastic, placed a collargol tablet into the lesion, covered it with a sterile cotton pad, and applied a bandage. The mastic "arrested" the bacteria on the skin and prevented their migration into the wounds, especially because the dressing was immovable. The tablet immediately dissolved and penetrated into the crevices, whence the silver was absorbed. Collargolum has an indubitable antiseptic action and does not coagulate blood serum, so that the secretion flows off freely till the wound is clean; then a scab forms which soon drops off from the cicatrix.

He also used a 3 per cent. collargol-lactose dusting powder, which is even cheaper than iodoform, as well as 1:500 to 1:1000

solutions for irrigating facial sinuous wounds, the bladder, and the urethra. At laparotomies a 1:100 to 1:500 solution was poured into the cavities. Collargol is a surgical antiseptic to which no objection can be raised; it is nontoxic, nonirritant and obviates the need of working in phenol or lysol odors. The bichloride in the first aid packages should be replaced by collargolum, this giving a nontoxic antiseptic bandage kit.

Collargolised Catgut.

IN the *Annals of Surgery*, Jan., 1907, Dr. J. E. Blake reports laboratory experimentation with collargised catgut, which shows that it has a marked inhibitory influence on bacterial growth.

The catgut is prepared as follows: four coils of catgut, each containing ten strands, are wound on four glass slabs and placed for a week in a jar containing a 2% collargolum solution. The jars are shaken once or twice in the intervals. The slabs are then taken out, washed in sterile water till the excess of collargol is removed, and placed in 95% alcohol for 15 to 30 minutes. Then the individual strands are wound on separate spools, under aseptic precautions, and preserved in 95% alcohol till used.

Dr. Pilcher adds: silverised catgut has since been used in all my operations (more than 500) at the Seney Methodist Episcopal Hospital. It has continued to give me abundant satisfaction and to justify all expectations. There has been a notable absence of infective accidents in an active general service which includes nearly every variety of operative interference. Silverised catgut has become established as a permanent factor in our operating room methods.

TOPICS OF PUBLIC INTEREST.

An Abstract of Various Views in Medical Licensure.

By E. S. McKEE, M. D., Cincinnati.

(*St. Louis Medical Review*, February 6, 1907.)

RECIPROCITY was given a good deal of consideration by the President of the American Medical Association, at Boston, in his presidential address. Dr. Mayo thinks that what is needed is a higher standard of requirements and more and better supervision of professional schools. At the present time each State has its own standard of requirements. The conditions now with reference to reciprocity in medical license are well-nigh intolerable, and restrain the individual freedom guaranteed by the Constitution. The borders between the states are imaginary lines, yet a physician on one side of the border can not relieve human

suffering on the other side without becoming amenable to the law or subjecting himself to vexatious examinations which he has already successfully passed in his own state. This must be met, and speedily, by agreement between examining boards as to the minimum of requirements. After all, this is but a part of the educational problem. If we can solve this, licensing boards could at once adopt more uniform examinations and reciprocity.

UNRESTRICTED RECIPROCITY IMPOSSIBLE.

Dr. James A. Egan, secretary of the Illinois State Board of Health, has, in a paper before the Illinois State Medical Association, shown this to be true as to his view. The Illinois State law, for example, distinctly states that a license to practise medicine shall be given only after satisfactory examination, and in making provision for reciprocity it distinctly states that this shall be allowed only in the case of certificates issued by other boards after examination. The old practitioner, the one who is not so very old in fact, but in practice before a medical examination was required in this state, and who was consequently licensed without an examination, is barred from practice in Illinois without an examination, either in his own state, if that has reciprocity with Illinois, or in Illinois. Illinois has, however, gone farther than any other state to mitigate the laws in this respect. It allows a credit of 5 per cent. on the required 75 per cent. of successful answers for each five years the candidate has been in active practice. Certainly a very fair and considerate arrangement. Illinois has gone the limit in reducing this hardship to a minimum. If all the other States would follow the example of Illinois they would be as wise as just. If the practice of medicine can not be taken out of the State and placed in the interstate laws, the hardship resulting in individual cases could be materially mitigated by the adoption by the various states of some such regulation as, according to Dr. Egan, has been adopted by his State.

RECIPROCITY A QUESTION OF STATES' RIGHTS.

The Editor of the *Medical Record* (July 28, 1906), discusses the remarks of President Mayo at Boston in his desire that an agreement may be reached whereby a legalised practitioner in one state may be recognised as such in every other state. Theoretically, the editor thinks this is a very desirable state of affairs, but practically, at least till the older generation of physicians shall have passed away, an impossibility. He agrees that the conditions are "well-nigh intolerable" but does not assent to the "boundaries between states being imaginary lines." The doctrine of states' rights was shorn of some of its exaggeration in the '60s, but it exists, and must so long as the present constitution of the United States continues in force. The editor does

not wish to be put down as opposed to reciprocity in medical licensure, but is, on the contrary, in favor of the fullest reciprocity compatible with the laws of the individual states.

TEN YEARS' PRACTICE EQUIVALENT TO A LICENSE.

Dr. W. L. Rodman, of Philadelphia, makes the excellent suggestion that ten years of practice should be considered the equivalent of passage of an examination for license to practise. Any physician holding the diploma of a reputable college, who has had ten years' experience in practice, certainly should be permitted to practise anywhere in the United States.

A UNIFORM EDUCATIONAL BASIS THE SOLUTION.

Dr. William Warren Potter, of Buffalo, editor of the *Buffalo Medical Journal*, wrote for that most excellent series of prize essays in the *New York Medical Journal* (January 20, 1906) on the subject of Reciprocity. His essay very justly took the prize. He thinks that when the preliminary or entrance requirements, the length of terms and methods of a collegiate training, and licensing examinations are placed upon a uniform basis throughout the country, the problem of reciprocity in medical licensure will be solved. This he thinks to be the only equitable solution of the perplexing question. "Of what avail is reciprocity unless founded on justice? Surely an enforced interchange of licensing courtesies would be worse than none; it would be irritating, unfair and ephemeral. Whereas, if founded upon uniformity of standards, it would be pleasing, just and enduring. It seems strange, almost absurd, that entrance requirements have not already been placed upon a basis of uniformity. It is well-nigh scandalous that it has not been established. Ignorance should not be tolerated anywhere among those who contemplate entering upon the study of medicine and the colleges throughout the length and breadth of the land should agree without unnecessary delay upon the minimum of preliminary or entrance qualifications. This once done it would be a comparatively short step to the standardisation of the methods of teaching, as well as the length of the undergraduate terms. Finally, with these two essentials agreed upon, the licensing boards would be compelled to establish a uniformity of methods of examinations, and, likewise, the states could no longer withhold indorsements of licenses.

"The Association of American Medical Colleges can be depended upon to establish the first two propositions, namely, the uniformity of entrance requirements and the length of collegiate terms and methods of teaching. It will then be 'up to' the examining boards and State authorities, to use a trite expression of the day, to see that their methods become of uniform standard and that reciprocity is established with promptitude.

"I am persuaded, from considerable observation and experience, that interstate reciprocity in licensing is best accomplished through the avenues named, and, indeed, that only in this way can it be accomplished with fairness to all the variant interests, with lasting credit to the profession, and with substantial benefit to the licensees who expect to derive advantages from this privilege."

RECIPROCITY AND INDIVIDUALISM.

From the young and vigorous editors of the *Buffalo Medical Journal* and *New York Medical Record*, and the secretary of the Illinois State Board of Health, the "pattern" saint of licensing bodies, we will now turn to Dr. Deering J. Roberts, the long-time editor of the *Southern Practitioner* of Nashville, who acknowledges his age, and that a quarter of a century ago in his address before the general session of the American Medical Association as chairman of the section on State Medicine he was more or less active in opposing the efforts at that time, instigated as he then thought and still thinks by misguided members of our profession, to establish a regulation of the medical profession by an appeal to the various state legislatures. Dr. Roberts may be wrong in some respects, but as late surgeon C. S. A. and a practitioner and teacher for forty-five years he has probably done more to alleviate human misery directly or indirectly than any two of the others mentioned. The doctor reviews the history of medical legislation for some fifty years, and fails to see that the advance which has been made in medicine is due to the regulation procedures of the various legislatures. He grants that medicine and surgery have made great strides, and he hopes they will continue, but, as in former years, it will be due to the individual and combined efforts of the profession equally as well without as with the aid of the law.

Reciprocal relations are such that Dr. Roberts thinks it will be many a day before we can get the different states to agree upon any definite and uniform plan. From personal observations he can cite that the same board has passed undergraduates and rejected graduates of the same school and even in some instances has passed those who have failed to secure the degree after the full four years' course and an examination by the faculty of the school.

The *Southern Practitioner's* editor suggests that the retired medical officers of the Army, Navy and the Marine-Hospital Service be authorized to make examinations of all who may apply, a certificate of approval to qualify them to practise medicine and surgery in the District of Columbia and all the Territories. Said certificate, he confidently believes would be recog-

nised by nearly if not all of the states. Boards of three members each could be readily convened annually in the different sections of the Union, at some central, convenient city, to which recent graduates and older members of the profession could apply for reexamination if they desired to have free range in the days to come in which to pursue their vocation.

These retired medical officers are all well qualified and competent, they have no very strong local or political affiliations, their loyalty being more to the national government as a whole and the United States at large, rather than to any special local environment. The fees would add something to their reduced pay, as having been placed on the retired list of their special branch of service, and the duties would not be onerous to them.

RECIPROCITY IN MEDICAL LICENSURE.

Dr. Albert Vander Veer, of Albany, Regent of the University of the State of New York, states in the *New York Medical Journal* for October 13, 1906, that New York, New Jersey, Michigan and Ohio have entered into a reciprocity agreement based on examination only in any one of them. The preliminary education required for admission to the medical schools must be the same in each state. The unit of value in measuring or estimating the preliminary qualifications is the count which is of universal use in New York State, and is in accord with the academic syllabus for the secondary schools. The following interesting facts are related:

"From the report of an American consul in Austria, Hugo Donzelmann, Prague, March, 1898, the following statement of the principles of the first laws promulgated in Europe with reference to the practice of medicine and pharmacy is condensed. Their principle is still apparent in all later laws, namely, the public good, and this principle is the underlying principle in the growth of laws affecting admission to the practice of the learned professions in the United States.

"The first decree of Frederick II., in 1224, can be said to have been the fundamental constitution of all existing laws in Europe, the same having been amended and improved upon from time to time, but always bearing in mind that the practice of medicine and pharmacy was to be under the special care and supervision of the government in order to protect its people against imposition. In that year he established by a decree the first college for the education of physicians, at Naples, and promulgated the first laws governing the practice of medicine within his domain, viz., that no person should be admitted to the practice of medicine who had not passed his examination before the Collegio Medico di Napoli; that after having received his diploma from said college it became necessary for the person to enter into active practice with a regular practising physician for the period of one year as assistant; and that an oath had to be taken by the person whereby he promised to follow and live up to the laws of the country respecting the practice and sale of medicine and whereby he bound himself to attend to the sick, to accept only a reasonable fee from all who were able to pay, and to treat the poor and impecunious free and without charge."

The New York statute establishing these standards whereon reciprocity may be entered into with other States, reads as follows:

"Applicants examined and licensed by other State examining boards registered by the regents as maintaining standards not lower than those provided by this article, may, without further examination, on payment of \$10 to the regents, and on submitting such evidence as they may require, receive from them the endorsement of their license or diploma, conferring all rights and privileges of a regents' license issued after examination."

In determining whether standards are lower than those provided by the statute, four distinct lines of statutory requirements are studied: (1) the preliminary education required for admission to the professional school; (2) the professional training required for graduation; (3) the licensing test required by an independent examining board: and (4) registry in offices of record.

The present preliminary education of New York State required for admission to registered medical schools and the medical licensing examination, is evidence of four full years of secondary education subsequent to eight years of elementary or the equivalent in higher institutions. The evidence of this preliminary education is the medical student certificate, in the determination of which certain specific requirements are exacted.

The professional requirement for the registration of medical schools and for admission to the medical licensing examination is the study of medicine not less than four full school years or at least nine months each, including four satisfactory courses of at least six months each in four different calendar years in a medical school registered as maintaining at the time a satisfactory standard.

The formal licensing examination is but one of the three essentials to a license to practise medicine in the State. The first essential is based on the principle that the student had completed his preparatory work prior to entrance on his professional, with the possibility of his being conditioned in not more than one year of the preliminary training, *which must be worked off before beginning the second course counted toward the degree.*

The second essential, a degree from a registered professional school, is a marked step in advance of the requirements in foreign countries, as it is well known that very few of the medical practitioners of Germany and Russia complete the requirements for a degree, the State's examination being regarded as even a higher qualification.

The third essential is the formal written licensing examination, which is based on the former essentials and is the final act in the government's special care for the public good. The ques-

tion of the use of English does not enter into the revision of the applicant's paper, although he is obliged to use the English language in his answers, for his mental training was determined by the first essential requirement. No effort is made by the formal written test to determine the clinical experience of an applicant, such requirement having been met under the second essential. The final test—the licensing examination—determines the competency of the candidate applying for admission to the *general* practice of medicine in the State, in order to protect the people against imposition.

The importance of these agreements can hardly be overestimated, and to show the marked advance of this step Vander Veer quotes from Bulletin 8, *Professional Education in the United States*, entitled, *Medicine*, issued January, 1900:

"A uniform standard for admission throughout the United States is impracticable at present, owing to varying conditions as to density of population, educational advantages, and general development. Weak States cannot maintain the standards maintained elsewhere, and strong States cannot afford to lower their standards. The present need of less multiplication of standards, however, is most important. Instead of a separate standard for almost each political division, two or at most three standards should answer for all. In the first group should come the strongest States, and the standards maintained by these States would act as a stimulus to weaker political divisions."

From a careful consideration of the *synopsis* published in *Handbook 9* of the education department, it plainly appears that reciprocity can become effective in the near future between a group of States extending from the Atlantic to the Pacific.

THE HARDSHIPS OF EXISTING CONDITIONS.

Pathetic correspondence is contained in recent numbers of the *American Journal of Clinical Medicine* from two elderly doctors who were compelled to move from the East to Oregon and and Washington, the one for the benefit of his wife's health, the other for the good of his own health. For nearly thirty years, one of them writes, he had been a regular practitioner, a graduate, a registrate, a member of a society recognised by the A. M. A., and yet he is not fit to practise in Oregon. He says: "Here I am, a man fifty-four years of age, too old to be very successful in any other line of business, an invalid wife, no means to speak of, and yet I shall not have the means to earn my bread and butter. All this in a profession in which I have had so much pride, which I regarded as the noblest and kindest, but which, on the Coast, seems to desire to Oslerize old Eastern brethren. There is need of a little justice, fair play and the use of the Golden Rule. Medical legislation is not to keep one honest man from competing with another, but to keep quacks, charlatans and

thieves from preying upon the public. It is foolish to say that a man fit to practise in one State is not in another."

HOW MAY INTERSTATE RECIPROCITY BE BEST ACCOMPLISHED.

Do away with ignorance among those entering the profession of medicine. The minimum of preliminary or entrance qualifications should be agreed upon without delay. Follow the example of Illinois and mitigate the laws as much as possible for the old practitioner by allowing him a rebate, as it were, of five per cent. for every five years he has practised. An examination or degree should be given by the Federal Government, not unlike that recommended by Dr. Roberts, which license would be received with honor by most if not all the States. Much wrong is evidently done men who have practised for twenty-five, thirty, or more years and are compelled to remove to another State. Selfishness is at the bottom of much of this discrimination, and should give way to broader and more generous views. It is un-American.

Medical Society of the State of New York.

Action of the House of Delegates Relating to the Medical Society of the County of Erie.

[From New York State Journal of Medicine, February, 1907]

IN view of the fact that the Medical Society of the County of Erie, through its attorney, is of the opinion that certain portions of the constitution and by-laws of the Medical Society of the State of New York, and of the advisory by-laws sent out for adoption to county societies, are in conflict with the statute laws of the State of New York, the Ad Interim House of Delegates, at a meeting held in New York, December 8, 1906, resolved to consult the Hon. William G. Choate, former Justice of the United States Court, with the idea of ascertaining his views on the subject and of preparing a bill for the purpose of remedying any defects that may exist. The opinion of Judge Choate, and the bill, are herewith appended, and it is proper to add in this connection, that the views held by this eminent jurist are also held by the counsel of the Medical Society of the State of New York, Mr. James Taylor Lewis.

OPINION OF MR. WILLIAM G. CHOATE.

I have carefully examined all the laws of this State relating to the Medical Society of the State of New York and to the State Medical Association; also the entire proceedings for the consolidation of the two societies, for the purpose of advising you as to my

views with reference to the introduction of a bill at the coming session of the Legislature. I have reached the following conclusions:

First: Although by the early statutes certain persons were made permanent members or delegates, and although certain institutions were permitted to send delegates to the annual meeting of the Medical Society of the State of New York, there is no doubt whatever that the legislature has the power to change or modify the laws of 1806 or 1813, and prescribe different qualifications and methods of election of members. By section 23 of the laws of 1813, that act was expressly made, subject to modification, amendment or repeal, and was declared a public act.

Secondly: Before consolidation of the two societies, chapter 549 of the laws of 1904, was enacted, in effect amending section 3 of the laws of 1813. By its terms full authority was given to your society to elect such members as may be provided for in the constitution and by-laws of the society; "said Medical Society being empowered to fix and determine the qualifications and conditions of membership therein, and to regulate and control its own membership." Chapter 544 of the laws of that same year gave the society the privilege of adopting a constitution and by-laws relative to the admission and expulsion of members and the regulation of its affairs, and sections 5 and 7 of the laws of 1813 were expressly repealed. The act authorizing consolidation, chapter 1 of the laws of 1904, provided that the consolidated corporation should have all the powers, rights and privileges possessed by either corporation, at or immediately prior to the consolidation. The order consolidating the two corporations was entered after all these laws were passed. The consolidation agreement and the order, adopted a constitution and by-laws by which the same full power with regard to membership was vested in the consolidated body. I am of the opinion, therefore, that you need no further legislation in any manner referring to your membership.

Thirdly: By the same course of reasoning, I believe the establishment of the House of Delegates, the Council and Censors are now complete and in accord with legal enactments.

Fourthly: The society has ample power to collect its dues. The special charter granted the association at section 5 thereof, gave that corporation the power to determine the amount of the annual dues and also to impose assessments and to collect the same by suit or otherwise. The consolidation, therefore, brought to the present state society this provision, which in effect removed the limitation contained in chapter 682 of the laws of 1893, which act permitted but five dollars to be imposed as dues and assessments in any one year. To the same effect were the provisions of chapter 549 of the laws of 1904, which gave to the society the power to fix and determine the conditions and qualifications of membership therein, and to regulate and control its own membership.

Fifthly: There is but one matter upon which legislation is desirable. I am of the opinion that a broad power given to the state society to determine what county societies are in affiliation with it, and the conditions on which such affiliation shall continue, will give the society all the power it needs.

Sixthly: Under the present statutes the state society may hold \$150,000 in property; if you think it advisable to enlarge that amount, it may be accomplished by legislative enactment.

Seventhly: There may possibly be doubt as to whether the property of the society is exempt from taxation. In 1903, county medical societies were apparently considered as not coming within exemptions of scientific societies. If it is desirable to make this exemption certain, a separate act should be passed amending subdivision 18 of section 4 of the tax law.

I am therefore of the opinion that the Medical Society of the State of New York, as now constituted under its by-laws and constitution, can go into operation and continue business without embarrassment, even without any further legislation, and the acts of the **ad interim** House of Delegates performed under the authority of the order of consolidation and the constitution and by-laws of the society are entirely legal so far as they conform to the authorisations contained therein.

The principal point seems to be that there may be rights of permanent membership heretofore created by statute inconsistent with the absolute right of the society to regulate its membership. There is no objection to adding to your act a section providing that all laws and parts of laws creating permanent members or delegates to the Medical Society of the State of New York inconsistent with chapters 1, 544 and 549 of the Laws of 1904, or with the order of court consolidating the two corporations made in pursuance thereof, are hereby repealed.

If you consider that some members would be satisfied only with a legislative re-enactment of powers which the state society now has, I know of no legal reason why that should not be done, but such a course I consider absolutely unnecessary, and my advice is, therefore, opposed to such action.

AN ACT IN RELATION TO THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

The People of the State of New York represented in Senate and Assembly do enact as follows:—

Section 1. The Medical Society of the State of New York, re-constituted and continued by the consolidation of the Medical Society of the State of New York and The New York State Medical Association, in accordance with the terms of chapter One of the Laws of Nineteen Hundred Four, shall have power from time to time to determine what county medical societies are in affiliation with it, and to prescribe the terms and conditions under which any county medical society shall be or shall continue to be so affiliated, and shall have power to suspend and discipline affiliated county medical societies.

Section 2. All acts or parts of acts, relating to permanent members or delegates in, or to delegates to the Medical Society of the State of New York, inconsistent with the provisions of Chapters Five Hundred Forty-four and Five Hundred Forty-nine of the Laws of Nineteen Hundred Four, or inconsistent with the order of the Supreme Court made and entered December Ninth, Nineteen Hundred Five, pursuant to the provisions of Chapter One of the Laws of Nineteen Hundred Four, so far as they provide for such members or delegates, are hereby repealed.

Section 3. This Act shall take effect immediately.

The Prevention of Unnecessary Blindness.

THE NEW YORK STATE COMMISSION to Investigate the Condition of the Blind has issued the following circular which should receive the careful attention of every medical man in active practice. It is important that the commission should be in possession of all the facts possible to obtain on the points mentioned at an early day.

Editor Buffalo Medical Journal: SIR: The loss of sight in the case of an individual is of economic importance to the state. The New York State Commission to Investigate the Condition of the Blind has been charged, therefore, by the legislature with the duty of inquiring into the causes of blindness, and of recommending methods by which, as far as possible, unnecessary blindness may be prevented. To that end the commission begs the assistance and advice of the medical profession. The secretary will gratefully receive and acknowledge any reprints, reports, pamphlets—or personal communications bearing on the causes and prevention of blindness.

More especially, information is sought on the following points:

Congenital Blindness:

Its causes, the influence of heredity, consanguinity, etc.

The reports of cases of blind parents producing blind children, character of blindness in such cases, and any other material facts relating to this phase of the topic.

Ophthalmia Neonatorum:

How generally are preventive measures employed?

Statistics bearing on the subject.

What silver salt and in what strength should be recommended?

Trachoma and Other Infectious Eye Diseases:

Statistics.

How may early treatment be secured?

Prevalence in schools, orphan asylums, etc.

Preventive measures—medical inspection of schools.

Blindness From Accident, Injuries, Fireworks, Toy-pistols, Etc.:

Statistics.

Method of protection for eyes of workmen, and others.

Prohibition of dangerous explosives at celebrations.

Toxic Amblyopia:

From methyl alcohol—other toxic agents. How may the public be protected?

Neglect on the Part of Patients Visiting Dispensaries:

Patients suffering from conditions threatening vision absent themselves from clinics after being advised of the need of immediate treatment until too late.

Method of reaching such.

Blindness Due to Neglect of Slight Ophthalmic Injuries:

How can early treatment be more generally secured?

Blindness Due to Improper Hygiene and Sanitation in Corneal Troubles of Children:

How can early treatment be secured?

Other Causes of Blindness:

Suggestions as to prevention.

The Commission will be most grateful for advice and assistance on the above subjects.

F. PARK LEWIS, *President*,
454 Franklin St., Buffalo,
O. H. BURRITT, *Secretary*,
Batavia.

Batavia, N. Y., December 15, 1906.

The Prevention of Unnecessary Blindness.

THE COMMITTEE ON OPHTHALMIA NEONATORUM, of the American Medical Association, has issued the following:

To the Members of the American Medical Association:

While much has been written and many laws have been passed having as their object the protection of the eyes of newborn children, an appalling amount of blindness results each year from the neglect of preventive or curative measures in ophthalmia neonatorum. It is a serious criticism upon our efficiency and our position as a scientific body that a disease the prevention and effective treatment of which are so well understood should be allowed to cause such widespread disaster. It would seem that the time has come when ophthalmia neonatorum should be completely and permanently stamped out as a cause of infantile blindness. This can be accomplished, however, only by the concurrent action of the whole medical profession throughout the country.

In recognition of this fact the following resolutions were adopted at the last meeting of the American Medical Association:

Whereas, Notwithstanding the long-continued efforts of the medical profession to make generally known the infectious character of ophthalmia neonatorum and its danger to sight, the ranks of the blind are still largely increased annually by those who have unnecessarily lost their vision as a result of this disease; and

Whereas, We possess in the silver salts an almost absolute specific for its prevention and treatment, therefore, be it

Resolved, That this Section recommends that a committee consisting of at least one ophthalmologist, one obstetrician, and one sanitarian, with invited co-operation of a sub-committee, consisting of the president and secretary of each state society, be appointed by the President of the Association to formulate and make effective the details of a plan that may give uniform legislation and definite instruction to the profession and laity concerning the prevention and treatment of this disease.

Resolved, That this Section recommend an ophthalmologist for such committee to be appointed by the incoming Chairman and Executive Committee.

In fulfilling the directions of the association, the committee desires to present the following program, and it is earnestly requested that expressions of approval or of criticism be freely submitted for its guidance so that the recommendations of the committee shall be in effect those of the entire profession.

While it is true that merely washing out the lids of the new-born child with distilled water lessens largely the number of cases of ophthalmia neonatorum, the difficulty of this procedure in inexperienced hands, and the probability of cocci remaining in the eyes of the child, make essential the employment of some germicide; and by almost universal agreement one of the salts of silver is recognised as the most nearly specific.

1. As experienced pharmacists give the assurance that a solution of nitrate of silver, when hermetically sealed in light-proof receptacles will keep indefinitely, and as physicians are generally agreed that this is the most effective silver salt for the prevention of ophthalmia neonatorum as well as the most inexpensive, the choice of the committee would seem to be limited to this as the special germicide to be recommended.

Does this meet with your approval?

2. As the classical 2 per cent. of Crede occasionally causes silver catarrh and 1 per cent. rarely does so, and since as a preventive measure it must be used largely by students, midwives and other inexperienced persons, would it not be safer and better to select the 1 per cent. solution as the strength of nitrate of silver to be recommended?

In this connection the following statements from an address delivered by R. Brudenell Carter, at London, in 1902, are pertinent:

"There can be no possible reason why the instructed midwives whom we are hoping to obtain in the near future should not universally adopt this (Crede's) preventive treatment, and thus place the children of their patients beyond the reach of danger. The application ordered by Prof. Crede appears to me to be unnecessarily strong. For curative purposes I have always found a solution of one part in 240, or of two grains instead of ten to the fluid ounce of water, to be perfectly satisfactory; and I have no doubt that it would be equally so as a prophylactic."

Do you recommend a 1 per cent. solution of nitrate of silver as a prophylactic in all cases?

3. As the failure to use the silver salt as a routine part of every new-born child's toilet is largely due to the fact that the preparation is not at hand when required, should not this be met by the enactment of a law in each state securing the distribution through the various state health boards of small, sealed, inexpensive, light-proof, tubes or ampoules of the selected solution to be sent gratuitously to every physician and midwife on the passage of the law and subsequently when required or on the filing of each birth certificate?

Do you approve of this?

4. In order that this solution, which shall be freely supplied, may be always used, it shall be required that the birth certificate shall

contain a statement signed by the accoucheur that some recognised procedure specified on the blank has been used in each eye of the new-born child on the day of birth as a preventive of ophthalmia neonatorum; in the absence of this statement should ophthalmia neonatorum develop and the child lose the sight of one or both eyes, the accoucheur, whether physician or midwife, filing the certificate, shall be deemed guilty of criminal negligence and shall be subject to such penalty as the state may exact.

Does this meet with your approval?

5. It shall be the duty of the State Health Officer to place ophthalmia neonatorum on the list of communicable diseases, and failure of the attendant to report to the local health board each birth, the existence of ophthalmia neonatorum when present, and the fact that some prophylactic measure has or has not been used, shall be considered a misdemeanor and subject the offender to such penalty as the state may exact.

Do you approve of this?

6. It is strongly urged if the above program meets with general approval that the president of each state association be invited to appoint a Committee on Ophthalmia Neonatorum whose duty it will be to collaborate with the State Board of Health in securing in the several states the enactment and enforcement of laws embodying the above propositions.

Do you approve of this?

The committee will feel grateful for a categorical reply to each of these questions and such further suggestions or comments as you may wish to make concerning this important subject.

F. PARK LEWIS, *Chairman*, Buffalo, N. Y.

J. CLIFTON EDGAR, New York, N. Y.

F. F. WESBROOK, Minneapolis, Minn.

CORRESPONDENCE.

Drevet Manufacturing Company vs. Liquozone Company.

Liquozone Barred from Registration in U. S. Patent Office as Unlawfully Interfering with the Trade-mark Glycozone.

Letter from Prof. Marchand, president of the Drevet Manufacturing Company, giving notice of prosecution in case of infringement.

Editor Buffalo Medical Journal:

SIR:—I beg to call your attention to the inclosed legal notice which was mailed to wholesale druggists on February 7, 1907.

I would appreciate your kindness very much if you will publish a notice in the next issue of your Journal, which might read as follows:

“Liquozone” barred from registration in U. S. Patent Office as unlawfully interfering with the trade mark Glycozone.

Notice is hereby given that in a proceeding in the United States Patent Office, which is entitled *The Drevet Manufacturing Company vs. The Liquozone Company*, the name "Liquozone" was barred from registration in the U. S. Patent Office as unlawfully interfering with the trade-mark Glycozone.

The individual or corporation in any way infringing upon the trade-mark "Glycozone" which is a lawful trade-mark (Glycozone being a thoroughly scientific and legitimate preparation for the treatment of germicidal diseases, etc.,) and duly registered under the new trade-mark law, or selling of any merchandise labeled with any mark or name infringing upon the trade-mark "Glycozone" or in any manner resembling the same, will be prosecuted for damages to the full extent of the law.

Hoping that you will kindly comply with my request so as to help me repair the damage done to our business on account of the confusion between the two names Glycozone and Liquozone, I remain,

CHARLES MARCHAND,

President Drevet Manufacturing Co.

NEW YORK, February 8, 1907.

Medical Department, University of Pennsylvania, Raises its Requirements for Admission.

Editor Buffalo Medical Journal:

SIR:—I take the liberty of sending you a statement of the requirements for admission to the Medical Department of the University of Pennsylvania, which have recently been adopted by the Board of Trustees.

According to the plan finally adopted, the requirements will be increased gradually beginning with the annual session in September, 1908, and reach the maximum September, 1910. The present requirements cover four years graded course in a High School or its equivalent. The essential points in the new requirements are as follows:

I. For the session 1908-1909, in addition to the present requirements, either one of two foreign languages, French or German; (2) Physics; (3) Inorganic Chemistry, including qualitative analysis; (4) General Biology or General Zoology.

II. For the session of 1909-1910, in addition to the requirements of 1907-1908, the candidate must have completed successfully work equivalent to that prescribed for the Freshman Class in Colleges recognised by this University.

III. For the session 1910-1911, in addition to the requirements of 1907-1908, candidates must have completed success-

fully work equivalent to that prescribed for the Freshman and Sophomore Classes.

IV. Candidates who have successfully completed at least three years of an accepted College Course, may be admitted with conditions in Chemistry, Physics and General Biology or Zoology.

The maximum requirement is two years of collegiate training, including Biology, Chemistry and Physics. The two additional years of Collegiate training are regarded as an adequate preparation for entrance into a professional school. The importance of the candidate having had instruction in subjects leading to the study of Medicine is so generally recognised that Biology, Chemistry and Physics have been added to the requirements. This combination of special and general training is without doubt a much more logical requirement than a Collegiate degree which does not imply any special preparation for medical studies.

CHARLES H. FRAZIER.

Philadelphia, February 15, 1907.

THE DANGER OF DUST AS A CAUSE OF TUBERCULOSIS.—Dr. George Homan, of St. Louis, contributed a paper on this subject at the recent annual meeting of the Mississippi Valley Medical Association in which he submitted the following points: (1) That efforts toward the eradication of human tuberculosis will fail which do not take full account of household dust as a factor in the dissemination of that disease; (2) that scientific tests have shown that the seeds of pulmonary tuberculosis, harbored within doors in the dried state, are capable of retaining their effective vitality for prolonged periods of time; (3) that any method or procedure employed in inhabited buildings which causes dust to be disseminated must be considered as tending to spread the seeds of consumption; (4) that hotels, clubs, theaters, office buildings, schools, churches, and business establishments generally should be required by law to introduce and operate dustless methods of cleaning. This part of their mechanical equipment should be held as necessary as provisions similarly made for warming, ventilation, and for fire protection and fire escape. The employment of dustless methods in private residences is urged as being equally imperative for the control and suppression of all forms of tuberculous disease.—*Medical Fortnightly*.

Reporter—To what do you attribute your great age?

Oldest Inhabitant—I bain't sure yet, sir. There be several o' them patent med'cine companies as is bargainin' with me.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 238 DELAWARE AVE., BUFFALO, N. Y.

VOL. LXII.

MARCH, 1907.

No. 8

The Prevention of Unnecessary Blindness

IF it be true, and there seems to be little doubt of it, that less than thirty per cent. of all cases of blindness are absolutely unavoidable and that by the adoption of practical measures this calamity might be averted in a large number of instances, the subject is one of more than medical interest; it becomes at once one of great public importance. It has long been known that gonococci conjunctivitis contributes enormously to this needless loss of sight. Just what proportion of eyes are lost from this cause it is difficult to determine. The most careful figures seem to be those of Magnus who in 2528 cases of blindness found 10.86% due to ophthalmia neonatorum.

The British Royal Commission on the Condition of the Blind estimated that there were about 7000 persons in the United Kingdom who had lost their sight from this disease, or about 22 per cent. of the entire blind; while Ramos says that in Mexico the common cause of blindness is ophthalmia neonatorum, and that in round numbers 4500 or about 30 per cent. owe their blindness to this disease. It is gratifying, therefore, that the American Medical Association has taken up this subject seriously, as will be seen from a circular letter published elsewhere in this issue, in endorsement of Cohn's pronouncement "that this disease must and shall disappear before the advance of civilisation." Significant, too, is the fact that for the first time the state recognises the economic importance of preventing unnecessary blindness and thereby limiting pauperism. The open letter of the commission covers a wider range of subjects. The deadly toy pistol and other Independence Day explosives and methyl alcohol, which is a cause of optic nerve atrophy, have already engaged the attention of the medical profession. That the inquiries which are

being instituted should give data of great and permanent value as a basis for protective legislation, cannot be doubted. Of almost equal importance are the investigations on which the commission is employed concerning the ability of the blind to engage in productive work. As Helen Keller has said:

"There is no law on the statute books compelling people to move up closer on the bench of life to make room for a blind brother; but there is a divine law written on the hearts of men constraining them to make a place for him not only because he is unfortunate, but also because it is his right as a human being to share God's greatest gift, the privilege of man to go forth unto work."

Unfortunately, the appropriation for doing the important work which the commission was directed to perform was inadequate for its purpose and a supplemental bill has been introduced into the legislature asking for a further appropriation of five thousand dollars. There should be no hesitation whatever on the part of the legislature in promptly passing this bill. Similar permanent commissions for the blind have been created in Massachusetts and in Maine, in the latter state with an appropriation of twenty thousand dollars for carrying on its work. The unpaid labors of the men engaged in these important investigations should receive the seal of prompt approval, for the valuable results accruing from their efforts cannot be estimated either from a humanitarian or an economic viewpoint.

Farce Comedy and Expert Evidence

THE trial of an apparently perverted individual with mental strabismus, if one may rely on the accuracy of the associated press reports, for the wanton killing of a man whom he believed to have been the cause of the moral ruin of a woman he later made his wife, has brought vividly to the public attention the dramatics and the farcical elements of expert evidence. The trial reeked with the drippings of the immorality of the artistic element of New York city; it stank with the bestiality of gem encrusted vice and then, after the legal foundation had been laid, came the experts.

The first to take the stand was Dr. C. E. Wiley, of Pittsburg, whose position was best expressed in his own plaintive plea during the grilling he received at the hands of District Attorney Jerome: "I came here as a witness of fact and they have made of me an expert without any preparation."

That poor wail of woe from the depths of a perturbed spirit is one of the strongest arguments the lay reader could wish in justification of his general denunciation of the average expert

testimony. Dr. Wiley as a witness was an error; as an expert he was a gelatinous failure. Whether he was an expert or a witness of fact, he made statements which were beyond redemption; statements which if made by a sophomore in any medical school would have been sufficient to set him back for another year in the dissecting room. It is not worth while to go into details regarding the answers made by Dr. Wiley; it is sufficient to mention that when he was asked where the pneumogastric nerve entered the spinal cord, he replied, according to the published report, that it was in the lumbar region; he did not know the Romberg test; he could not tell its purpose or where it was mentioned; he confessed to an almost infantile ignorance of the textbooks covering the specialty he practised—mental and nervous diseases; he thought Argyl-Robertson were the names of two men who had done work on the eye; he did not know clearly what the Argyl-Robertson "eye test" was; he had never heard of the consensual test; he was absolutely in the dark regarding the anatomy of the nervous system; he could not tell what organs were supplied by the pneumogastric nerve nor tell its other name; nor could he give the origin or course of any of the cranial nerves. And he even permitted Mr. Jerome to quiz him regarding the function of the "lymphatic nerve" without correcting him. Whether Jerome was honest in speaking of the "lymphatic," having misunderstood the whispered question of one of his own experts, or whether he purposely mislead the witness is not known; but Dr. Wiley let slip a golden opportunity to play with the district attorney.

At the present writing, Dr. Britton D. Evans, superintendent of the insane asylum at Morris Plains, N. J., an expert for the defense, is occupying the center of the stage and undergoing cross examination at the hands of Mr. Jerome, who appears to be leading up to the point where he will compel the witness to declare that the prisoner is mentally incapacitated at the present time, upon which, presumably, to lay the foundation for an application for a commission in lunacy to determine the defendant's mental status.

Aside from the fact that Dr. Evans is patently on the stand for the purpose of proving that the prisoner was insane when he killed his man, and immediately became sane when his job as the self-elected agent of Providence was completed, he is a witness with whom the district attorney has had considerable trouble, for he knows his subject thoroughly and is a careful and not at all backward witness of the expert class. He answers when he thinks it advisable for the interests of his side and when he doesn't he just squirms, and in many instances has succeeded in

escaping being pinned down to a "yes" or "no" answer. He has all the finesse of an expert and understands all the niceties of the legal loopholes through which such a witness, who keeps his wits about him, may wriggle when necessity arises. He has declared that the prisoner was suffering from a "brain storm" and a "mental explosion" at the time of the killing; but under the skilful guidance of the diplomatic Mr. Jerome he was led to the statement that the murderer had been mentally irresponsible prior to the killing and prior even to the time when he succeeded, after repeated effort, in obtaining the woman whom he afterward married. There are other experts to be heard and their evidence will be interesting reading.

As to the effect of Dr. Wiley's statements the worst they have done is to give rise to a new expression—a "wileyism"—indicative of a statement which on its face is either merely absurd or purely assinine. It has been explained in defence of Dr. Wiley's poor showing that he was suffering from stage fright. That may be so in a measure; but expert evidence in such a case would bring forth the fact that stage fright is characterised by silence—inability to speak; and not by the making of wholly hopeless answers of simple fact.

The Military Surgeon

THE official organ of the Association of Military Surgeons, published by Major James Evelyn Pilcher, will hereafter be known as "The Military Surgeon," a change in title which is more distinctive of the character of the publication and one which appears more generally acceptable. Beginning merely as the channel through which the transactions of a limited association were given to the profession, it has grown under Major Pilcher's able editorship to be the one accepted authority on military medicine, hence its change of title gives it the proper recognition to which it is rightfully entitled.

Military medicine is a branch which is sadly neglected in the professional schools of this country; it does not appear to be considered in the light of a specialty, apparently, even in face of the mistakes and lessons of the Spanish war. However able a surgeon or physician may be he is a mere tyro when, without experience, he enters the field of military medicine, and for this reason may be ascribed the enormous paper losses sustained by the government during the recent war. Aside from the purely executive function of the military surgeon, the practice of medicine under arms is quite a different matter from the pursuit of the profession in civil life; and while it may be strictly termed a

specialty, yet it is one in which the general practitioner will find much to interest him and much which will tend to improve his workaday methods.

Dr. Pilcher, as a pioneer in this field, and as editor of *The Military Surgeon*, has done work of inestimable value in placing before the profession the specialty of military medicine, and doing so in a manner which strips it of all the dry-rot exclusiveness characteristic of some of the other branches of practice. *The Military Surgeon* is interesting not alone to those who are closely allied to military medicine, but will be of benefit to others whose interest may be merely that of transient curiosity.

There is no country in the world which is not represented in the membership of the Association of Military Surgeons and the contributions to the pages of *The Military Surgeon* are of necessity varied, geographically speaking.

Membership in the Association is open to surgeons of the Army, Navy, National Guard, Naval Militia, Public Health and Marine Hospital Service, and to those who have ever had professional connection with any of these branches of the service. It is the duty of everyone who is eligible to assist in the upbuilding of a great organization by giving it actual support. At any rate, a broad-minded interest in the welfare of the association would be personally beneficial to those who are not eligible to membership, either active or associate. Major Pilcher may be addressed at Carlisle, Pa.

Insurance Lemons for Physicians

IT has been brought to the attention of *The Journal* that one of the large insurance companies through its local agents has been made a party to a species of grand larceny in the effort to increase business among physicians. There has been reported one case of particular flagrancy which amounts to little less than ordinary theft on the part of the local agent and which if done in any other manner in everyday life would be susceptible of legal relief.

In brief, the method in this particular case was this: A physician was approached by the agent of a company which is ranked as "old line," and informed that a change was to be made in the corps of examiners; that he had been particularly decided upon for appointment, but that it would be necessary for him to take out a small policy. This was done and the application for appointment was made out, references given and all the requirements complied with. Within a week, it was stated to the physician, as on the authority of the general agent of the company, that the appointing power would visit Buffalo within a few days and that if an additional policy were immediately taken out to

bring the whole insurance up to a certain amount, the appointing power would then have no objection to offer to immediate selection, and that then the work of examination of applicants for insurance in the company would be turned over to the physician. Further, it was outlined by the agent, after a conference with the general agent of the company, that examinations were to be made at a specified place at a specified rate; that the company he represented was one of the progressive organisations which had no part in the effort to reduce the examination fee to \$3; that its fee was \$5 and would remain so. The policies were taken out as suggested and the new application for appointment was made out, professional and business references being given as required.

Nothing more was heard of the matter for several weeks and when inquiry was made of the agent as to the status of the application, the physician was informed that the appointing power had been delayed in his arrival in Buffalo, and that it would be better to wait his arrival in order that a personal interview might the better clinch the appointment. From time to time excuses were made. After several months, during which time the physician merely waited with suspicion-sharpened patience, the original agent presented himself and placed the blame on the general agent of the company, stating that the delay was due to his neglect to bring the matter before the appointing power who had been in Buffalo. The physician expressed himself as of the belief that he had been swindled and the agent, after expressing regret that the general agent had acted in so unbecoming a manner, departed. The next move was the appearance, not wholly unexpected, of the general agent, who called to apologise for the statements made in the beginning by his agent, and saying that it was all a mistake; but that some day if a vacancy should occur, the physician would be considered for the position of examiner for the company.

This is a synopsis of the statement made to The Journal. Other matters were touched upon more in detail and they lead The Journal to believe that the securing of the premiums from the physician amounted to plain theft. There is every reason to believe that there are other physicians who have been buncoed in much the same manner and if so The Journal asks that the particulars be sent to this office. In the case in question, now that the agent and his stool pigeon have declared themselves, it is the intention to bring the entire matter before the officers of the company. Later, when additional facts are received in incontrovertible form, the company and the agents will be introduced to the profession. In the meantime it will be sufficient to say that the

company in question is neither a New York nor a New Jersey corporation.

Tearing Aside the Veil

A SUIT in equity has been brought in the superior court at Concord, N. H., for the purpose of securing an accounting of the receipts and expenditures of the fortune of Mrs. Mary Baker G. Eddy, pastor emeritus of the Christian Science Church and author of all the works on christian science which amount to anything in a financial sense. The appointment of a receiver is also asked. The plaintiffs are Mrs. Eddy's only son, George W. Glover, his daughter, Mary Baker Glover, and Mrs. Eddy's nephew, George W. Baker. The real petitioner is Mrs. Eddy herself. The New York World which brought to public attention a fact suspected by many outsiders, and generally known within the inner circles of the church, that Mrs. Eddy was mentally and physically incapacitated and was being kept in seclusion while a living dummy was sent out in her stead on the daily drives, published on March 2 the facts connected with the bringing of the suit.

It is interesting reading and in view of the fact that the defendants named are the members of the Eddy household at Pleasant View, it is quite likely that revelations of a more or less intimate character will be forthcoming. The papers tell a most pathetic story of the inability of the son to reach his mother without interference from the servants of the house. His letters were read by others and answered by them; and when he finally did gain access to the presence of his mother, a feeble and tottering old woman greeted him and his daughter, an old woman rapidly approaching her grave, who babbled of a "stolen will," and a plot to kill her; whose mind wavered and flickered between the events of today and the happenings of tomorrow, and to whose memory, age-crumbled and fleeting, the things of a week ago were lost in the musty ages of a past long, long forgotten.

This suit is not an attack on the Christian Science Church or any of its beliefs; they do not enter into the case at all; the action is for the protection of an old woman who is under the influence of people surrounding her who are not laboring in her interests. Vast sums of money are involved and the revelations which are to come when the trial is reached will be amazing in their ramifications and world-wide extent. That there is nothing in the nature of a circus display or tom-tom hurrah about the action, is shown by the fact that the senior counsel for the plaintiffs is ex-senator William F. Chandler, of New Hampshire.

It is more than likely that there will be considerable science of a certain financial character disclosed in the trial; but just how much christianity will be shown remains to be seen.

THE medical inspection of schools is an important question for the municipality to deal with. A large gathering of prominent women met the aldermanic ordinance committee recently, at which several of them spoke in an intelligent and telling fashion. The health commissioner, Dr. Wende, has included in his estimates for the coming year an item of \$2,500 with which to employ two physicians at \$1,000 each and one nurse at \$500, to provide for such inspection. This is altogether too small an amount and the inspectors are too few, but it would make a substantial beginning and is perhaps adequate to test the practicability of the plan. We submit, however, that the only way to inspect is TO INSPECT!! Let the Common Council provide the ways and means at once in order that the important work can begin without delay.

DR. E. H. PORTER, the state commissioner of health, recently issued the twentieth annual report of his department, which is probably the most comprehensive survey of the questions belonging to the public health problem in this state that has been made in recent years. It is our purpose at this time, because of limited space, to refer to but one topic—namely, the registration of vital statistics. There is room for decided improvement in this branch of the public health work. The commissioner recommends a bill providing for the filing of all birth, marriage and death certificates outside of Greater New York in the state department. At present Buffalo, Albany and Yonkers file their own. The state should have a complete file of these records. The legislature should make haste to provide adequate means to improve the registration of vital statistics on the lines recommended by the commissioner.

LIEUTENANT JAMES CARROLL of the Army Medical Corps rose from the ranks to his present position. He rendered valuable service as a member of the army board for the study of infectious diseases in Cuba and was associated with Major Walter Reed in his studies and experiments with the yellow fever mosquito. Dr. Carroll submitted to the bite of an infected mosquito and suffered a severe attack of yellow fever as the result. It is proposed to promote him to major in the army by special act of congress as a reward for his invaluable services. It should be done without hesitation.

PERSONAL.

DR. JOHN YOUNG BROWN, superintendent and surgeon in charge of the city hospital at Saint Louis, was recently appointed chief surgeon to St. John's Hospital in that city. Dr. Brown was also unanimously elected professor of clinical surgery by the faculty of Saint Louis University, to succeed Dr. A. V. L. Brokaw, deceased. During the four or five years that Dr. Brown has been in charge of the city hospital he has transformed it from a condition almost bordering on a pest house to one of the largest and best equipped hospitals in this country. He has nearly or quite thirty assistants under him, and has performed all the operations known to surgery with results that are second to none. Dr. Brown is a native of Kentucky, son of the late Governor John Young Brown, and by birth, education, and training is everyway fitted for the new positions which he is about to undertake and which will soon necessitate the yielding of his present charge to enter upon private surgical practice.

DR. CHARLES HAASE, a graduate of the University of Buffalo, 1902, and more recently assistant surgeon at the State Soldiers' and Sailors' Home at Bath, has lately sailed for Europe for recreation and study. It is his announced intention to pay a three months' visit to the Mediterranean region and afterward engage in a year's medical study in Vienna.

WILLIAM NOTTINGHAM, of Syracuse, was reelected a regent of the University of the State of New York by both houses of the legislature, February 12, for the full term of eleven years, beginning April 1, 1907.

DR. J. E. WALKER, superintendent of the Steuben Sanitarium, Hornell, N. Y., who has been spending some months in the south of Europe, has returned to his home and resumed his professional work.

DR. R. PARK, of Buffalo, has been appointed a visitor to attend the West Point graduating exercises in June, 1907.

OBITUARY.

DR. WESTON D. BIDAMAN, of Buffalo, died at his home February 15, 1907, after an illness of several months, heart trouble being announced as the cause of death, aged 55 years. He was born in this city and graduated in medicine from the Uni-

versity of Buffalo in 1878. Dr. Bidaman was in continuously active practice from the date of graduation until he was seized with the illness that proved fatal—a period of nearly thirty years. His professional life, especially in later years, had been a busy one and he obtained and retained the respect of his colleagues, as well as that of a large acquaintance. He was a member of the Medical Society of the County of Erie. Dr. Bidaman is survived by his wife, Marie L. Bidaman, nee Barrows, and one son, Miner D. Bidaman. The funeral was held from the family home on Sunday afternoon, February 17, at 2:30 o'clock, and the interment was at Forest Lawn.

DANIEL OSIRIS, the philanthropist, a wealthy Greek, died at Paris, February 4, 1907. He purchased Malmaison, the château a few miles from Paris, which was the residence of the Empress Josephine from 1798 to 1815, renovated it and, in December, 1900, presented it to the French people for use as a Napoleonic museum. He replaced some of the former fittings and furniture, and employed artists to obliterate the traces of pillage left by the Prussians and the Communists.

In 1899 M. Osiris presented to the Institute of France a sum representing an annual income of about \$6,500 for a triennial prize of \$20,000, open to all countries, for the most remarkable work or discovery of general interest, especially in the fields of surgery and medicine.

DR. GEORGE BINGHAM FOWLER, of New York, died at his home in that city March 6, 1907, from hemorrhage of the stomach, in the sixtieth year of his age. Dr. Fowler graduated at the College of Physicians and Surgeons, now the medical department of Columbia University, in 1871, and soon afterward became assistant to Professor John C. Dalton in the department of physiology, where he remained for eight years. He was Health Commissioner of New York during the Strong administration and since 1886 had been professor of clinical medicine at the Post-Graduate Medical School and Hospital. Dr. Fowler was a man of versatile talents, distinguished as a teacher and writer and was a citizen with high ideals.

DR. WILLIAM H. MYERS, of Fort Wayne, Ind., died at his home January 5, 1907, after an illness of two weeks, aged 80 years. Dr. Myers was a graduate of Jefferson Medical College, 1855; served as surgeon of the 30th Indiana volunteer infantry during the civil war; was a leader in the establishment of hospitals at Fort Wayne, and in the organization of the Fort Wayne Medical College; was a surgeon of distinction and was noted in addition

for his capability as an expert medical witness. He was a Founder of the American Association of Obstetricians and Gynecologists, becoming an Honorary Fellow in later years.

SOCIETY MEETINGS.

THE BUFFALO ACADEMY OF MEDICINE held meetings during the months of February and March as follows:

Section on Surgery.—Tuesday evening, February 5. Program: Treatment of Rodent Ulcer on the Face, James Bell, Attending Surgeon Royal Victoria Hospital, Montreal, Canada.

Section on Medicine.—Tuesday evening, February 12. Program: (a) Diseases of the naso-pharynx in infancy, John Lovett Morse, Associate Professor of Pediatrics, Harvard Medical School, Boston; Discussion opened by Dr. Irving M. Snow; (b) Some effects of spirit and drug taking on the upper air passages, T. D. Crothers, Superintendent of Walnut Lodge Hospital, Hartford, Conn.

Section on Pathology.—Tuesday evening, February 19. Program: Spirochetes, illustrated with lantern slides, F. G. Novy, University of Michigan, Ann Arbor, Mich.

Section on Obstetrics and Gynecology.—Tuesday evening, February 26. Program: (a) Presentation and report of a case of melena neonatorum following cesarian section, Wm. G. Taylor; (b) Unnecessary operation especially in the female, J. Henry Dowd.

Section on Surgery.—Tuesday evening, March 5. Program: (a) A working formula for the treatment of intraperitoneal infection, William B. Jones, Attending Surgeon St. Mary's Hospital, Rochester, N. Y.; (b) Typhoid ulceration, John Parmenter.

COLLEGE AND HOSPITAL NOTES.

THE ERIE COUNTY TUBERCULOSIS HOSPITAL has been subjected to severe criticism of late. Dr. John H. Pryor, of Buffalo, an expert in the hospital treatment of consumptives, who established and superintended for some time the New York state hospital for the treatment of incipient tuberculous patients at Raybrook in the Adirondacks, lately presented a searching critique to the charity organisation society, which was referred to an investi-

gating committee. The committee's report lately sent to the board of supervisors, sustains all the charges made by Dr. Pryor and comments exhaustively on the mismanagement of the hospital resultant from the ill considered action and want of action by the county legislators. The report is signed by W. Harry Glenny, chairman; Daniel J. Kenefick, the Rev. Samuel V. V. Holmes, Mrs. Melvin P. Porter, DeLancey Rochester, P. W. Van Peyma, Mrs. C. Peter Clark, Jessie H. Jewett, Julius Ullman, Simon Fleischmann, Mrs. Lucien Howe and Irving P. Lyon.

THE UNIVERSITY OF BUFFALO, all the departments participating, celebrated University Day February 22, 1907, with exercises at the Teck Theater appropriate to the occasion. A dinner of the associated alumni was given the previous evening at the Ellicott club. On the twenty-second the exercises began at 11 a. m. with an invocation by Bishop Walker, the vice-chancellor, Mr. Charles P. Norton, having previously called the vast assemblage to order. After instrumental and vocal music by the band and the university glee club Mr. Norton introduced Mr. J. N. Larned, who spoke at some length and with fervid eloquence, the text of his address being an argument for the establishment of a college of arts. The audience was a representative one composed of distinguished citizens, city officials, prominent women, alumni and undergraduates. University day was originally established by the alumni of the medical department February 22, 1899.

THE NEW YORK SKIN AND CANCER HOSPITAL announces that Dr. L. Duncan Bulkley will close his clinical course with four special lectures as follows: March 27, Practical Points in the Diagnosis and Treatment of Diseases of the Skin; April 3, Errors in Diagnosis and Treatment; Don'ts in Dermatology; April 10, Danger Signals from the Skin; April 17, The Significance and Treatment of Itching. Also a lecture by Dr. William Seaman Bainbridge, April 24, Some Phases of the Cancer Problem. Illustrated by a series of cases. In the Out-Patient Hall of the hospital, at 4:15 o'clock. The lectures will be free to the medical profession.

THE ERIE COUNTY MATERNITY HOSPITAL was formally opened March 5, 1907. It is a stone building two and a half stories in height, containing a large circular ward, a sun room, a diet kitchen, a confinement or operating room and every modern improvement. The hospital staff consists of Dr. Regina Flood

Keyes, obstetrician; Dr. Carroll Roberts and Dr. Gurdon Potter. Miss Nellie Davis is the new superintendent and Miss Bertha Jones the assistant superintendent; Miss Dark is the assistant night superintendent.

THE UNIVERSITY OF BUFFALO has selected the last week in May in which to hold commencement ceremonies. The executive committee of the medical department alumni association has issued a preliminary circular inviting suggestions from the members as to the form and method of conducting the annual alumni meeting this year. It is important that early replies to this circular be made to the chairman of the Committee, Dr. Albert T. Lytle, 200 Lexington Avenue.

BOOKS AND AUTHORS.

The Harvey Lectures. Delivered under the auspices of the Harvey Society of New York. 1905-1906. Philadelphia and London: J. B. Lippincott Co.

The Harvey Society of New York was organised in the spring of 1905 through the efforts of Dr. Graham Lusk for the purpose of spreading knowledge of the medical sciences through the means of public lectures in annual series dealing with the purely experimental study of medicine, the lectures to be given by those who devote their time to experimental work largely. The lectures are not, as might be supposed, confined to a bare recital of the results achieved by the lecturers themselves, except in rare instances; they are rather a broad presentation of the subject of experimental medicine from the laboratory point of view. The lectures are given under the patronage of the New York Academy of Medicine and present a critical review of the work done in each subject considered in the light of the most recent advances.

The titles of the lectures published in this volume are as follows: Theory of narcosis, Prof. Hans Meyer, University of Vienna; Modern problems of metabolism, Carl van Noorden, University of Vienna; On trypanosomes, Frederick G. Novy, University of Michigan; Autolysis, P. A. Leven, Rockefeller Institute for Medical Research; A critical study of serum therapy, W. H. Park, University and Bellevue Hospital Medical College; The neuroses, Lewellys F. Barker, John Hopkins University; Fatigue, Frederick S. Lee, Columbia University; The formation of uric acid, Lafayette B. Mendel, Yale; The extent and limitations of the power to regenerate in man and other vertebrates, T. H. Morgan, Columbia.

N. W. W.

The Medical Student's Manual of Chemistry. By R. A. Witthaus, M.D., Professor of Chemistry, Physics and Toxicology in Cornell University. Sixth edition. Octavo, pp. 820. New York: William Wood & Co. 1906. (Price, \$4.00).

In the new edition of this excellent chemistry the section of chemical physics and general chemistry has been rewritten insofar as the latter applies to chemical physics. Inorganic chemistry has been reduced to its smallest compass, for the author very properly believes that the object of chemical teaching should not be to cram the student mind with a store of isolated facts, but rather to train him to reason out chemical problems for himself. Organic chemistry has been rewritten in order to conform to the latest information upon the relationship of substances.

Physiologic chemistry has been amplified and much space is given to the consideration of the proteins and other substances of unknown constitution, more particularly the composition of the tissues of the fluids of the body and the chemical processes occurring therein. The questions which are still unsolved or yet under discussion are either very briefly referred to or passed over without comment. The necessity for keeping pace with the rapid growth of chemical science has of course, made the book much larger than its predecessors. Altogether it is one of the most complete and comprehensive works on modern chemistry now before the profession.

N. W. W.

Diseases of the Stomach and Intestines. By Boardman Reed, M.D., Late Physician in Chief to the Samaritan Hospital, Philadelphia. Second edition. Illustrated. Octavo, pp. 1021. New York: E. B. Treat & Co. 1907. (Price, \$5.00).

It is less than two years since the first edition of this book was published and in that time its popularity has been demonstrated; hence it is not surprising a new edition has been found necessary. Special attention has been given in the newer work to the more important advances and therapeutic improvements in the field covered, and much new material has been added. A fact which must be pleasing to the author is that several matters which, in the first edition, were adversely criticised, have since that time become generally recognised and accepted. Particularly is this demonstrated in the recognition of eye strain as a cause of gastrointestinal symptoms; dependence on hygiene and diet as well as electric and other mechanical measures in preference to routine drug giving, and the recommendation of extreme caution in the use of tuberculin. The fact that his note of warning regarding the latter has been generally accepted and followed must be particularly gratifying to Dr. Reed. The book is an excellent one for the general practitioner and it may be followed with much benefit in daily work. It will prove of great value to the younger men of the profession.

N. W. W.

A Manual of Otology. By **Gorham Bacon**, A.B., M.D., Professor of Otology in the College of Physicians and Surgeons, New York. With an Introductory Chapter by Clarence John Blake, M.D., Professor of Otology in Harvard University. Fourth Edition. 12mo., pp. 485. With 134 Illustrations and 11 Plates. New York and Philadelphia: Lea Brothers & Co. 1906. (Price, \$2.25).

When a book, crowned with success, gallops through three editions in a short time and a fourth revision is necessary by the demand of the profession, it goes without saying that there is more than good publishing behind it. Bacon's Manual of Otology in the fourth edition has been improved over its predecessors in more than the mere rewriting of its preface. The author has brought it up to date and kept pace with all the advances made in otologic work since the third edition was placed before the profession. New illustrations have been added and newer topics considered, among them osteomyelitis and primary jugular bulb thrombosis and suppurative inflammation of the labyrinth. Those chapters dealing with leukocytosis, lumbar puncture and the treatment of facial paralysis have been rewritten. A very laudable addition is the appendix wherein is considered the method of preparing smears of pus, the making of cultivations and the physiologic inoculation experiments. In its present form the book is one of the most serviceable of its field and will be of inestimable value to the general practitioner.

N. W. W.

Plaster of Paris and How to Use It. By **Martin W. Ware**, M.D., Adjunct Attending Surgeon, Mount Sinai Hospital; Surgeon to the Good Samaritan Dispensary; Instructor in Surgery, N. Y. Post-Graduate Medical School. 12mo; 72 illustrations, about 100 pages. New York: Surgery Publishing Co. (Cloth, \$1.00).

Occasionally out of the raft of books on a variety of medical subjects there comes a little volume on a commonplace topic which, by very reason of its familiarity, has been neglected. One such is Plaster of Paris and How to Use It, and it takes its place among the really valuable books in a medical library by pure right of conquest. There is a demand for such instruction as is contained in this book. If there isn't there ought to be when one considers the mud-pie methods so frequently seen in surgical practice. This isn't a hardened, corrugated, superior sort of a book. On the contrary it is a narrative, with a prodigality of illustrations which tells all about the uses to which plaster of paris may be put in surgery, from the making of a bandage to its use as splints and corsets. It will be more or less of a jolt to many users of plaster to find out how little they really know about the manner of handling it, after they have read this book. It is worth while. In spite of the fact that it makes one aware of his shortcomings it doesn't bite into one's vanity very viciously.

N. W. W.

The Diseases of the Nose, Throat and Ear. By Charles P. Grayson, M.D., Clinical Professor of Laryngology, Medical Department, University of Pennsylvania. Second edition, revised and enlarged. Octavo, about 550 pages, with 152 engravings and 15 plates in black and colors. Philadelphia and New York: Lea Brothers & Co. 1906. (Cloth, \$4.00, net).

The most salient feature of the first edition of this book was the selection by the author of just what his readers wanted to know and the very delightful and understandable manner of presentation.

It is easy to overdo in dealing with a specialty and write a bulky volume, heavy-laden with verbosity; it requires the work of a literary genius as well as a master of the field, to present an entire subject in so compact a volume, so intelligent a fashion.

Not only does the author tell what to do in any case under consideration but he tells how to do it and removes all doubt by adding the why. Each condition is taken up in detail and the best therapeutic treatment is outlined. There is much new material in the text and many new illustrations. It is not necessarily a book which will appeal only to the specialist; it has a personal interest for the general practitioner.

N. W. W.

Lea's Series of Pocket Textbooks. Diseases of Children. By George M. Tuttle, M.D., Attending Physician to St. Luke's Hospital, St. Louis, Mo. 2d edition, revised. 12mo, 392 pages, with 5 plates. Edited by Bern. B. Gallaudet, M.D. Lea Brothers & Co, Philadelphia and New York, 1907. (Cloth, \$1.50; flexible leather, \$2.00; net prices).

This is one of the most important of the Lea Pocket Textbook Series and the superior excellence of Tuttle's presentation of the subject makes it one of the more valuable of the smaller work on pediatrics. Only those diseases and phases of physical disturbance which are met with in the period from birth to adolescence are considered, and the author has presented in a very compact and understandable volume all the essentials of an important branch of medicine.

N. W. W.

A Textbook of Histology. By Frederick R. Bailey, M.D., Adjunct Professor of Normal Histology, Medical Department of Columbia University, New York. Second, revised edition. Illustrated. Octavo, pp. 497. New York: William Wood & Co. 1906. (Price, \$3.00).

The general excellence of the first edition of this work has been materially improved in the present volume by the betterment of some of the drawings and the addition of new plates. The chapter on the nervous system for which the author apologised in the first edition has proven to be of great value and has been amplified here, there being more noticeable changes in this

section than in any other part of the book. It has been made necessary by the advances in neurohistology. To add to the completeness of the chapter several new diagrams have been added. The primary aim of the writer was to prepare a textbook which would be of assistance to the student in the laboratory and a genuine aid to the instructor, and he has admirably succeeded. Most excellent are the chapters on the urinary system and the reproductive organs. The illustrations and press work are beyond criticism.

N. W. W.

BOOKS RECEIVED.

The Practitioner's Medical Dictionary. An Illustrated Dictionary of Medicine and Allied Subjects, Including all the Words and Phrases Generally used in Medicine, with Their Proper Pronunciation, Derivation and Definition. By George M. Gould, A. M., M. D., author of "An Illustrated Dictionary of Medicine, Biology, and Allied Sciences," "The Student's Medical Dictionary," "30,000 Medical Words Pronounced and Defined," etc.; Editor of "American Medicine." With 388 Illustrations. Octavo; xvi-1043 pages. Philadelphia: P. Blakiston's Son & Co. (Flexible leather, gilt edges, rounded corners, \$5.00; with thumb index, \$6.00, net).

A Textbook of Pharmacology. Including Therapeutics, Materia Medica, Pharmacy, Prescription-Writing, Toxicology, etc. By Torald Sollmann, M.D., Assistant Professor of Pharmacology and Materia Medica, Western Reserve University, Cleveland, Ohio. New (2d) edition. Octavo of 1070 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$4.00; half-morocco \$5.00, net prices).

Atlas and Textbook of Human Anatomy. Volume II. By Professor J. Sobotta, of Wurzburg. Edited, with additions, by J. Playfair McMurrich, A.M., Ph.D., Professor of Anatomy at the University of Michigan, Ann Arbor. Quarto volume of 194 pages, containing 214 illustrations, mostly all in colors. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$6.00; half-morocco, \$7.00, net prices).

A Textbook upon the Pathogenic Bacteria. For Students of Medicine and Physicians. By Joseph McFarland, M.D., Professor of Pathology and Bacteriology in the Medico-Chirurgical College, Philadelphia. New (5th) edition. Octavo volume of 647 pages, fully illustrated, a number in colors. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$3.50 net).

A Textbook of Diseases of Women. By J. Clarence Webster, M.D. (Edin.) F.R.C.P.E., F.R.S.E., Professor of Obstetrics and Gynecology in Rush Medical College, in affiliation with the University of Chicago. Large octavo of 712 pages, with 372 text-illustrations and 10 colored plates. Philadelphia and London: W. B. Saunders Company. 1907. (Cloth, \$7.00; half-morocco, \$8.00, net prices).

Diseases of the Lungs, by Robert H. Babcock, A.M., M.D., author of Diseases of the Heart and Arterial System. Octavo, pp. 829. With twelve colored plates and 104 text illustrations. New York and London: D. Appleton and Co. 1907. (Price \$6.00).

The Elements of the Science of Nutrition. By Graham Lusk, Ph.D., M.A., F.R.S. (Edin.), Professor of Physiology at the University and Bellevue Hospital Medical College, New York. Octavo of 326 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$2.50 net).

Materia Medica for Nurses. By Emily M. A. Stoney, Superintendent of the Training School for Nurses at the Carney Hospital, South Boston, Mass. 12mo of 300 pages. Third edition, thoroughly revised. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$1.50 net).

The Immediate Care of the Injured. By Albert S. S. Morrow, M.D., Attending Surgeon to the Workhouse Hospital and to the New York City Home for the Aged and Infirm. Octavo of 340 pages, with 238 illustrations. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$2.50 net).

Biographic Clinics. By George M. Gould, M.D., Editor of American Medicine. Vols. IV and V. Influence of Visual Function, Pathologic and Physiologic, upon the Health of Patients. 12mo, about 400 pages each. Philadelphia: P. Blakiston's Son & Co. (Price, \$1.00 each, net).

Manual of Clinical Chemistry, by A. E. Austin, M.D., Professor of Chemistry and Toxicology in the Medical Department of Tufts College, Boston. 12mo, pp. 278. Boston: D. C. Heath & Co. 1907. (Price, \$1.75).

Annual Report of the Surgeon-General of the Public Health and Marine Hospital Service of the United States for the fiscal year 1906. Washington: Government Printing Office.

A Manual of Pathology. By Guthrie McConnell, M.D., Pathologist to the St. Louis Skin and Cancer Hospital and to St. Luke's Hospital, St. Louis, Mo. 12mo of 523 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1906. (Flexible leather, \$2.50 net).

Thornton's Pocket Medical Formulary. New (8th) edition, revised to accord with the new U. S. Pharmacopeia. Containing about 2,000 prescriptions with indications for their use. Lea Brothers & Co., Philadelphia and New York. 1907. (Leather, \$1.50 net).

Essentials of Obstetrics. By Charles Jewett, M.D., Professor of Obstetrics and Gynecology, in the Long Island College Hospital, Brooklyn, N. Y. Third edition, thoroughly revised. 12mo, 413 pages, with 80 engravings and 5 colored plates. Philadelphia and New York: Lea Brothers & Co. 1907. (Cloth, \$2.25, net).

Saunders's Hand-Atlases. Atlas and Epitome of Dentistry. By Prof. Gustav Preiswerk, of Basil. Edited, with additions, by Geo. W.

Warren, M.D., Professor of Operative Dentistry at the Pennsylvania College of Dental Surgery. With 44 lithographic plates in colors, 152 text-illustrations, and 350 pages of text. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$3.50 net),

A Textbook of Pathology. By Alfred Stengel, M. D., Professor of Clinical Medicine in the University of Pennsylvania. Fifth revised edition. Octavo of 977 pages, with 399 text-illustrations, many in colors, and 7 full-page colored plates. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$5.00; half morocco, \$6.00, net prices).

A Manual of Normal Histology and Organography. By Charles Hill, Ph.D., M.D., Assistant Professor of Histology and Embryology, Northwestern University Medical School, Chicago. 12mo volume of 463 pages, with 312 illustrations. Philadelphia and London: W. B. Saunders Company, 1906. (Flexible leather, \$2.00 net).

LITERARY NOTES

THE ANNALS OF OTOTOLOGY, RHINOLOGY AND LARYNGOLOGY for December, 1906, edited by Dr. H. W. Loeb, Saint Louis, forms a Fraenkel Festschrift number. It is a handsome edition containing ninety-four titles, well illustrated and embellished with a frontispiece portrait of Professor Fraenkel.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION offers a prize of \$100 for the best essay on a medical or surgical subject written by a member of the association. All essays must be typewritten, and are to be sent to the Secretary, Dr. Henry Enos Tuley, 111 W. Kentucky Street, Louisville, on or before August 1, 1907.

ITEMS.

A BOARD OF OFFICERS will be convened to meet at the Bureau of Public Health and Marine Hospital Service, 3 B street SE., Washington, D. C., Monday, April 15, 1907, at 10 o'clock a. m., for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health and Marine-Hospital Service. For further information, or for invitation to appear before the board of examiners, address Surgeon-General. Public Health and Marine-Hospital Service, Washington, D. C.

PRELIMINARY examinations for appointment of Assistant Surgeons in the Army will be held on April 29 and July 29, 1907, at points to be hereafter designated. Permission to appear for examination can be obtained upon application to the Surgeon General, U. S. Army, Washington, D. C., from whom full information concerning the examination can be procured.

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

APRIL 1907.

No. 9

ORIGINAL COMMUNICATIONS.

Intestinal Resection and Anastomosis; A Rapid and Safe Method.¹

By W. L. WALLACE, M. D., Syracuse, N. Y.

A PATIENT who needs an intestinal resection is always in poor and often in desperate condition. Shock is profound from obstruction, strangulation, distention and absorption. An operation is therefore required which will give the quickest possible relief from these dangers and add as little shock of its own as possible. In other words, the relief from the shock of the obstruction must be more rapid than the addition of the shock of the ether, the cutting, the exposure and the hemorrhage.

Such an operation must relieve the distention and remove the poisonous fluids which are being absorbed, and make a safe resection and anastomosis without loss of blood and without soiling the peritoneum, and with great rapidity. Each surgeon develops a technic from his own observation and experience. My present method in a desperate case is about as follows:

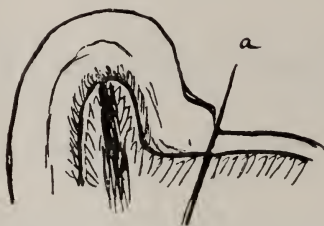
First, I assign the general care of the patient to a reliable medical or surgical colleague whose duty is to wash out the stomach, assist the anesthetist, and attend to salines, drugs and heat; and I even find that washing out the quarts of fecal-like gases and fluids that are in the stomach at the beginning of the operation is not sufficient, but that it is necessary to keep washing them out during and at the close of the operation.

The abdomen being open, the first step is to find the obstruction. The ileocecal region is explored, and if it is collapsed the trouble is in the small intestine and the collapsed gut is then followed up to the obstruction. If the ileocecal region is distended, the obstruction is in the large intestine and the sigmoid is next investigated.

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York, at Syracuse, October 16, 1906.

To illustrate the method of resection and anastomosis, let us find an obstruction and strangulation by a band in the middle portion of the ileum, and let the mesentery be more or less damaged by thrombosis so that it will have to be removed. *Fig. 1.*

Fig. 1.



Gut distended above and collapsed below obstructing band (a).

The obstruction being found, and a resection necessary, the next step is to decide how much bowel must be removed. The gut is usually damaged above the obstruction for a greater distance than at first appears and after having removed 6 inches, I have, on more careful examination, cut away 12 inches more. In order to go well above the damaged area let us decide in this case to remove 12 inches.

We are now ready to relieve the distention and stop the absorption by emptying the gut above. Moynihan passes a glass tube into the gut above the obstruction, drawing more and more of the intestine upon the tube as it empties itself, sometimes getting 10 to 15 feet upon a tube six or eight inches long. In this way the poisonous pressure is removed leaving the intestines above the obstruction empty and contracted, making room and suitable conditions for a rapid repair and an easy closure of the abdomen. With the instruction gained by using the Moynihan method, I proceed as described in the next paragraph.

The gut is drawn out of the abdomen above the obstruction without pulling away the band or adhesion, and the amount to be resected is decided upon, which in this case is twelve inches. This portion is gently emptied into the gut above by pressure with the fingers and is then clamped across about a foot above the obstruction with two pairs of common pedicle forceps, and cut through between the clamps. The upper end is now drawn away from the wound and a tube, such as a common stomach tube or a rectal tube, is passed at least twelve inches into the end of the gut and tied in; and the gut is allowed to drain through

this tube while the operation proceeds, more and more of the gut being drawn by the assistant upon the tube as it empties itself. *Fig. 2.*

Fig. 2.



Tube in gut for drainage. At the right the gut is being drawn upon tube.

The obstruction being found, the amount to be removed decided upon and the gut emptied, we are ready to resect. The piece of the gut to be removed is brought up and the band or adhesion which caused the obstruction is pulled away. The bowel is now clamped below the obstruction for cleanliness and convenience in handling and is cut across between the clamps. Much time and blood will now be saved, if we look through the mesentery holding an electric light behind it, unless it is thin, in order to be able to see the exact distribution of the bloodvessels. As we look upon the mesentery without the light behind, it appears opaque, and often we cannot see the vessels until they bleed; and at times, after having made a V cut into the mesentery without the lamp, I have found that I have not gone exactly straight, but have undermined one side, damaging the bloodvessels of the adjacent healthy gut, necessitating a wider resection. With a lamp behind, it is easy to throw a ligature around the arteries at the apex of the V and to tie all vessels before cutting.

The posterior border of the mesentery attached to the back of the abdomen is about six inches long. Its anterior border at the small intestines is about twenty feet long. Therefore, each inch of its posterior border supplies about forty inches of its anterior border, so that the vessels at the apex of the V which supply the twelve inches of gut to be resected are very few, and

the damage done by going half an inch to one side or the other may be very considerable; and on the other hand, when we are able to see the exact blood distribution, the control of hemorrhage at the apex of our V is easy and sure. *Fig 3.* The lamp

Fig. 3.



A thick mesentery. Lamp held behind at left showing bloodvessels by transmitted light. On right, by reflected light, bloodvessels indistinct.

behind may be covered with gauze, and this method saves much time and blood and uncertainty. The surgeon is confident. He can see that he has not cut off the blood supply of the edges of his repair. If the mesentery is very thin and transparent it is easy to hold it up and look through it without the lamp.

The damaged intestine and mesentery are removed and we are now ready for an anastomosis. *Fig. 4.* I can do this

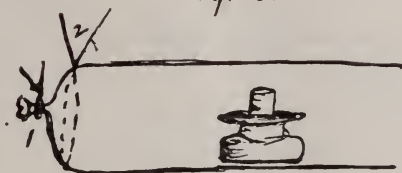
Fig. 4.



Gut resected. Ends ready for anastomosis.

most rapidly and satisfactorily by making a lateral anastomosis with a Murphy button, applying Hartley's method. I bring up the two ends which are to be joined, take off the clamp which is on the end below and drop into the end of the gut one of the halves of a Murphy button. Then I close this end, first tying it where it was clamped and then, with a fine purse-string suture, inverting this tied end. The end above is now picked up, the drainage tube is pulled out, the other half of the Murphy button dropped in, and the end closed in the same way. The two closed ends of the gut are then laid side by side and the halves of the Murphy button within are pushed together, making a lateral

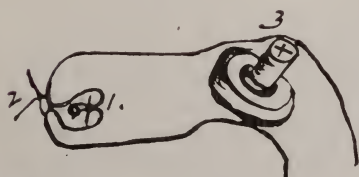
Fig. 5.



Half Murphy button dropped into gut. 1. End of gut tied. 2. Purse-string suture ready to invert tied end.

anastomosis. This is done as follows: one end of the gut is picked up and the half of the Murphy button within is found and grasped in such a way that its cylinder is made to press against the side of the gut one or two inches from the closed end. With a knife the bowel is nicked over the end of the cylinder of the button which is thus allowed to push through. The same is done with the other half of the button which is in the other closed arm of gut. The two halves of the button whose cylinders are thus protruding from within the gut, are pushed together and the anastomosis is complete. The sides of the mesenteric V are stitched together, and the abdomen is closed. Figs. 5, 6, 7, 8.

Fig 6.



1. Tied end inverted as (2) purse-string suture is tied. 3. Murphy button pushed against side of gut which is cut with cross to allow cylinder to protrude.

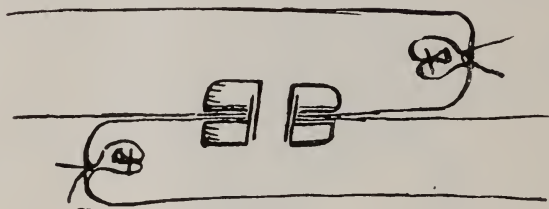
Fig. 7.



Half of Murphy button in place.

This method is very rapid. I can make this lateral anastomosis much quicker than I can do an end to end anastomosis. In addition to the time saved, I think this method much safer. In any end to end anastomosis, there is danger of the blood supply to some point of the repair being shut off. In this lateral method the possibly doubtful ends are turned nearly one inch

Fig 8



Lateral anastomosis complete.

into the gut. In doing an end to end anastomosis with a Murphy button, it is necessary to use a purse-string suture, puckering a gut one to two inches in diameter around a cylinder one-half inch in diameter, being sure that the mucous membrane does not pout at any point and that peritoneum is in exact contact with peritoneum. Moreover, the puckered mass is so uneven, with the mesentery crowded under at one side that considerable strain comes upon the button and some little point is liable to slip. At any rate, in doing an end to end anastomosis with a Murphy button, I have felt safer after reinforcing with sutures.

With the lateral anastomosis, the holes through which the cylinder ends protrude are of the exact size of the cylinders and no puckering string or stitches are needed, only two smooth and even layers of the gut being held between the parts of the button, with no undue or uneven tension on the spring and with the surfaces of gut in contact for a good distance from the edge of the communicating opening.

SUMMARY.

The stomach having been washed out and the other preparations made, the obstruction is found and the gut clamped above and below and cut across, a tube being tied in above to allow the distended bowel to empty itself. A light is held behind and the gut is resected. An anastomosis is made by dropping a half of a Murphy button into each arm and closing the ends, and then pushing the two halves of the button together.

620 EAST GENESEE STREET.

Leukocytosis in Surgical Infections.¹

By CHARLES O. BOSWELL, M. D., Rochester, N. Y.

FOR many years the fact that in most cases of infections, the blood shows an increase in the number of the leukocytes has been known. The phagocytic theory of Metchnikoff well explains this phenomena, and the polynuclear neutrophiles having the greatest phagocytic power were found to be responsible for this increase, the vast majority of the leukocytes being of this type. Yet, in not every infectious disease is there a leukocytosis, nor does it always increase proportionately to the extent of the infection.

Certain bacteria, such as the *b. typhosus*, do not seem to have the power to arouse in the blood stream an increase of the leukocytes. Again, certain factors favoring a virulent course of the infectious element may give rise to such an intense toxemia that the resisting power of the body is overcome and the blood may show only a slight leukocytosis. The theory of opsonins, lately given us by Wright, promises much that will further elucidate the problem of the infections.

It having been established as a well nigh universal rule that in the presence of a septic infection the blood shows an increase of the leukocytes, which increase is almost entirely composed of the polymorphonuclear cells, it was soon advocated as a diagnostic means to reckon the number of the leukocytes in the circulating blood and to repeat this procedure at varying intervals, believing that in this way some indication of the progress of the infection could be obtained.

Occasionally operative measures or autopsy showed that conclusions formed in this manner were not always correct. While generally the numbers of the leukocytes present in these acute surgical infections were in direct proportion to the extent of the infectious process and the power of the patient's resistance, occasionally no leukocytosis, or only a mild one, could be demonstrated; yet the most widespread septic conditions were revealed on opening the body, and this sometimes with only slight clinical symptoms. Or, again, where the patient clinically showed a most marked picture of sepsis, or a well walled off collection of pus would not give rise to leukocytosis! Such experiences seemed to cast a damper on the value of the number of leukocytes as an aid to diagnosis in these conditions.

The counting of stained blood smears had shown the disproportionate increase in the polymorphonuclear elements; still there was no absolute indication of the extent of the infection

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York, at Syracuse, October 16, 1906.

even here. There has not been found any definite proportion of polymorphonuclear cells to serve as the point at which suppuration may be said definitely to be present.

It was found that when suppuration or gangrene was definitely established that the proportion of these cells was often over 90% of all leukocytes, and with diminishing infection a steady decrease could be determined; also that a maintained or steadily progressing increase of the leukocytes, associated with a proportionate increase of the polymorphonuclear cells, was of good omen. With the recovery of the patient, the leukocytes would gradually lessen.

Gibson, writing for the April number of the *Annals of Surgery*, in an elaborate article claims great weight for the proportionate increase of the polymorphonuclear cells, and rightly claims a greater weight for this proportionate increase than for the increase in the total number, this phenomena meaning to him either a severe lesion, that is, an active infection or absorption, or a toxemia, or both. He shows a chart having a base line reading at 10,000, the high normal limit for leukocytes, and other line indicating 75% of polymorphonuclear cells, again the high normal value. By plotting this chart much as a fever chart is plotted, the parallelism of the factors is readily shown. This gives a guide to prognosis as well as furnishes an indication for or against operation.

While considerable time and attention has been given to the percentage of the polymorphonuclear cells and to the total number of the leukocytes, but little attention has been given to the other varieties of the white cells. The fall in proportion of the mononuclear cells, of course was noticed; but so far, no definite conclusions have been based on this factor.

Holmes, of Denver, read a paper before the section on Pathology and Physiology of the American Medical Association in June, 1904, in which he endeavored to show that the small mononuclear cells being nonphagocytic, served as an index of the patient's resistance and of the strength of the infection. This view is very different from what would naturally follow, the idea of phagocytosis being concerned chiefly with the polynuclear cells.

Another white blood cell—the eosinophile—has only recently been considered in connection with infections. Simon, of Baltimore, in the last edition of his textbook, published in 1904, made this statement regarding septic infections: "The neutrophils are relatively increased and the eosinophiles very much diminished, or absent altogether, except in osteomyelitis, which is an exception as regards the eosins."

About 18 months ago I had the privilege of working in Simon's laboratory, where, at that time, he was further investi-

gating the phenomena. He showed stained smears of blood from various septic conditions, all of which showed this change. It was not, however, until this year that he published the results of his experiments. The article appeared in the first number of the *International Clinics* for 1906 and is entitled, "A study of the Occurrence of Hypæosinophilia in Septic Infections." In this article he calls attention to the fact that in previous communications on the subject of blood in infectious diseases, while noting the relative increase of the polymorphonuclear cells, nothing has been said of the eosinophiles, thus overlooking the most important point,—namely, the increase of the polymorphonuclear cells associated with a decrease, or even a complete absence, of the eosinophiles. This phenomena he calls "the septic factor." He gives a list of 41 cases, all of septic nature, half of them being cases of appendicitis. In no case was the percentage of the polymorphonuclears below 76, while the percentage of the eosinophiles was never above .4. The experimental work was done on guinea pigs, and he found the same law to hold good. He concludes that the active agent producing this change is an intracellular ferment.

The percentage of polymorphonuclear cells, as given by him, is from 60-70, with 74 as the high normal limit; of the eosinophiles, 2-4. A further practical point noted by him, regarding the eosinophiles, is that as soon as convalescence is reestablished, they reappear in the blood and gradually assume a percentage which may be higher than normal, the so-called "epicritic eosinophilia." By this change a guide to beginning reaction is furnished.

For the past 15 months I have made numerous blood counts, having this phenomena in mind, and have yet to see it fail. The patients were, all but one, at the Rochester City Hospital,—both ward and private. I shall briefly report a few of these cases:

Case I. Miss G. L., private patient of Dr. Whitbeck, admitted to the hospital February 16, 1906; ill six days; diagnosis, appendicitis. Total leukocytosis 16,000. A differential count gave,

Small mononuclears	50	9.3%
Large mononuclears	25	4.7%
Polymorphonuclears	425	85.3%
Mast cells	1	.1%
Eosinophiles	2	.3%

Operation showed beginning gangrene of appendix; some portions of the ileum were ecchymotic and covered with lymph; no free pus. The wound was closed without drainage. Here was a fairly severe condition, with but a slight leukocytosis, but the altered interrelation between the polymorphonuclears and the eosinophiles, referred to as the septic factor, is readily seen. On February 19, total leukocytosis 14000, polys. 78.1%, eosins.

.1%. This is a decrease in both these values. The patient was not doing very well, being still septic with intermittent temperature and rapid pulse. On February 26, the patient was much better; temperature normal. Total leukocytosis 12,600, polys. 83%, eosins. increasing now 1%.

Case 2. Mrs. G. S., admitted to the hospital January 29, 1906. She had been ill 8 days; pain at first diffuse, later localised in right iliac region. Pain had suddenly ceased four days before admission, but fever and constitutional symptoms increased. Temperature on admission 101.4-5 degrees. Total leukocytosis 27,000, polys. 85%, eosins. 0. Operation by Dr. E. W. Mulligan. A gangrenous appendix was found, lying in a pool of pus and beginning general peritonitis. February 2, total leukocytosis 26,000, polys. 87%, eosins. 0. The paralysis of the the bowels, which had been present, was relieved today. February 5, no total leukocyte count, but the stained smear showed polys. 90%, eosins. 0. The patient died that night.

Case 3. Mrs. E. K. Seen by myself in consultation. This patient had undoubtedly produced an incomplete abortion on herself. The second day after flooding began her physician did a manual extraction of a dead fetus about four months old. Two days later signs of a beginning peritonitis appeared with great distention of the abdomen and complete obstruction of the bowels. I saw her on February 2, 1906, when fecal vomiting had existed for several hours. I did not make a total count, but the percentage of polys. in the stained specimen was 86, with no eosins. The urine gave a most marked reaction for indican. The patient was removed to the Homeopathic Hospital, where Dr. F. W. Zimmer performed an enterostomy. There was marked general peritonitis. Death resulted in a few hours. No further blood examinations were made.

Case 4. Mrs. E. S. Admitted to hospital February 17, 1906; service of Dr. Whitbeck. This patient had miscarried about 6 months ago. Soon afterward says she was ill with typhoid fever in a hospital (location not given), for about 16 weeks. As a result of this illness her joints, especially the left knee and the vertebra articulations, were left stiff, and for this reason she had employed massage freely up to a few days ago. On the day before admission she suffered from severe pain in the abdomen, gradually becoming localised in the right iliac region. Vaginal examination showed some tenderness in the region of the right ovary and complaint of pain throughout bowels. A blood count made by Dr. Witherspoon showed 20,000 leukocytes, polys. 76%, no eosins. Operation revealed a large, firmly adherent appendix, containing pus. There was also some pus about the appendix, so drainage was established. On February 18, total leukocytosis 16,400, polys. 89.7%, eosins. 0. On February 19, total leukocytosis 12,400, polys. 76.5%, eosins. .5%. Free drainage was now well established. On February 26, total leukocytosis 11,600, polys. 80.6%, eosins. 1%, and 2

normoblasts had somehow strayed in the field. Improvement was now so marked that the drainage tubes were removed.

Case 5. E. H. Admitted February 23, 1906; service of Dr. Hastings. Present illness began on the day previous with chill and pain in the abdomen. On admission the abdomen was distended, with tenderness in right iliac region, but no rigidity. Total leukocytosis 18,600; polys. 90.5%, eosins. 0. The appendix was found to be gangrenous with some free pus about it.

Case 6. A private patient of Dr. E. O. Jones, was admitted March 8, 1906. Diagnosis appendicitis. Total leukocytosis 14,200, polys. 90.4%, eosins. 0. Operation revealed a sloughed gangrenous appendix, with general purulent peritonitis. The patient died soon afterward. The operation was performed while I was making the differential count. I am told that I had stated—after making the total count—that I believed the low leukocyte count excluded pus. I do not remember having made any such statement, but if I did, it will serve as a warning not to be too free with opinions when I have only partially made a count. Certainly the septic factor is well established here and I would not have excluded sepsis after the differential count.

Case 7. Agnes S. Seen by me at the medical clinic of the O. P. D., July 17, 1906. She walked into the clinic with her mother, giving a history of illness of barely 24 hours. She had slight abdominal pain, with vomiting. The pain was becoming localised in the right iliac region; no tumor; slight rigidity of right rectus muscle on firm palpitation. Transferred to children's ward for observation. Temperature 99.3-5 degrees, pulse 130. This combination of rapid pulse rate out of proportion to the extent of fever, when there are suggestive symptoms, seems to me to be a most important point in the symptomology of appendicitis. Total leukocytosis 13,000, polys. 87%, eosins. 0. The pain in the region of the appendix becoming more acute, Dr. H. T. Williams operated at midnight, about 12 hours after the child was admitted. There was beginning gangrene, the appendix was swollen and surrounded by a plastic exudation. This case was most interesting. The apparent trifling illness of the child when she came to the clinic and the mildness of the pain made the diagnosis of appendicitis seem rather tentative, yet an operation only 12 hours later revealed an extreme extent of disease. The very low leukocytosis here would have misled if only the total count had been considered. No case illustrates the value of the septic factor better.

Case 8. Mrs. M. F. Admitted to the service of Dr. Whitbeck, June 6, 1906. Diagnosis puerperal sepsis. Patient was delivered May 30, and had a chill the following day. Leukocytes on admission 14,000, polys. 80%, eosins. 0. On June 8, total leukocytosis 36,000, polys. 85.4%, eosins. .3%. On June 10, the total leukocytosis had fallen to 10,000, polys. 91.8%, eosins. 0. There was extreme anemia, the red cells being very pale and exhibiting great irregularity in size and shape. Attempt at

blood culture proved negative, I being scarcely able to obtain any blood from the veins at the elbow. The patient was rapidly sinking and died June 15.

Case 9. D. E. Ward patient, service of Dr. Rose. Was operated Sept. 21, 1905, for suppurative appendicitis. No blood count was made previous to operation. Free pus was found and drainage tubes inserted. The following day the total leukocytosis was 11,500, polys. 82.6%, eosins. 0. On Sept. 24, total leukocytosis 11,700, polys. 82.3%, eosins. 2.6%. Free drainage going on, temperature normal. Sept. 27, total leukocytosis 12,500, polys. 75.7%, eosins. 6.6%, which is above the normal average. This hypereosinophilia is a common phenomena of recovery from infectious states and may, at times, reach as high as 10-12%. The discovery of eosinophiles is a matter of considerable encouragement for prognosis, as Simon has pointed out. On October 3, the total leukocytosis was 6,200, polys. 60%, eosins. 7.2%. The pulse, temperature and respirations had now been normal for 9 days. On October 11, no total count was made, polys. 70%, eosins. 6%. Patient discharged cured. This case illustrates beautifully the occurrence of an increase of eosinophiles as convalescence progresses.

In conclusion I wish to call attention to these findings:

1. The total leukocytosis, especially if but one count be made, is of little value and may mislead entirely in forming an opinion as to the extent of the infection.

2. There is no absolute number of leukocytes which answers definitely the question, "Is suppuration or gangrene already at hand"; nor any fixed percentage of polymuclear cells.

3. In these few cases gangrenous changes were often accompanied by a lower total leukocytosis than when pus outside the appendix was found.

5. It is not the percentage of the polymorphonuclear cells alone that is an index to the recuperative powers of the body, but the increase or reappearance of the eosinophiles that form the basis for prognosis.

6. Beginning improvement is always announced by a reappearance in the blood stream of the eosinophiles, which may exceed their normal values. Unfavorable termination is to be expected when these cells remain continuously absent and the percentage of the polymorphonuclear cells may slowly fall in such an event.

41 GIBBS STREET.

R. CRUCHET AND LEPAGE (*Annales de médecine et de chirurgie infantiles*, February, 1905) point out that as infants never expectorate but always swallow sputa, it is of great importance to examine their stools for the bacillus of Koch in cases where tuberculosis is suspected.—*St. Louis Medical Review*.

Version or High Forceps, Which and When?¹

By WILLIAM M. BROWN, M. D., Rochester, N. Y.

IF I were to attempt to give an accurate answer to the above query we would be led into an exhaustive consideration of the whole subject of dystocia and pathological labor, with the indications for and technic of both the high forceps and version operations. I shall not undertake so vast a subject, but the circumstances which attend the need of extraction from the pelvic brim are generally so serious and imperative, and are so often not recognised by the average attendant until both nature and himself have failed to deliver by the ordinary means, by which time the difficulties of an operative delivery are manifolded to the serious menace of both mother and child, and because of the exactions of his other work, the ordinary medical man is illy qualified to execute that extraction to the best interest of the patients who are the subject of his manipulations, that I am led to ask you to bear with me as patiently as possible while I discuss as briefly as I can, what renders operative interference at the superior straight necessary, when to exercise that interference and what that interference shall consist of. I say at the superior straight because a head that is well engaged is a mid-forceps application and is more safely extracted with forceps than by version if, indeed, version is possible at that time.

An essential prerequisite to satisfactory operative aid in labor, is a definitely accurate diagnosis of all the elements which enter into that particular case, which will afford a good working knowledge of the relations which exist between the mother and child and what the possibilities of that relation are. A trained accoucheur is able to estimate these elements in a given case with a fair degree of accuracy.

Now, while the use of the abdominal route for delivery in pathological labor is becoming much more general, we will reserve for some future discussion the question of Cesarean section and today take up only those cases in which it is possible to extract the child through the pelvis. Dystocia may be due to anomalies of the expulsive forces or to an abnormal condition of the generative tract, and Williams describes them under four heads as follows:

1:—Those in which the expulsive forces are subnormal and are not strong enough to overcome the natural resistance offered to the birth of the child by the bony canal and the maternal soft parts.

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York, at Syracuse, October 16, 1906.

2:—Those in which though the expulsive forces may be of normal strength, abnormalities in the structure or character of the birth canal offer a mechanical obstacle to the descent of the presenting part.

3:—Those in which the fetus on account of faulty presentation or excessive development cannot be extruded by the 'vis a tergo.'

4:—Those cases in which accidental complications such as eclampsia, hemorrhage, etc., lead to various irregularities which interfere with the normal progress of labor.

As before noted, the most essential requisite for satisfactory work in operative obstetrics, and by that I mean not to be satisfied with merely being able to tear a child out and have the mother survive, or perhaps both mother and child, but maimed and mangled to future misery, but satisfactory in that the extraction can be accomplished with a minimum of injury to either mother or child, is a most painstaking examination and study of each individual case. Alas! in the present day of comprehensive practice how prone are we to grasp each case that crosses our path, glad that we have it, but how apt are most of us, in the rush for more, to forget to hold fast to that which we have. Careless study of our cases predisposes to accidents and accidents are fatal to the confidence of our patients. There are few branches of our art where accidents may be so surely anticipated and avoided or their effects minimized, as in the department of obstetrics. With this digression I return to the consideration of the subject of this paper.

When shall we interfere in a labor with the head at the pelvic brim, and shall that interference be a version or a high forceps extraction? Having eliminated those cases of dystocia where an absolute indication for abdominal section is present, there yet remain those cases in which, by reason of a disproportion between the size of the head and the brim of the pelvis, it is difficult or impossible for the uterine muscle to force the head to engagement, or those cases which, by reason of impending or actual danger to either mother or child, require a very rapid emptying of the uterus. Such conditions may be toxemia with profound sepsis or impending or occurred eclampsia, or, perhaps, a placental separation with concealed hemorrhage.

From this we see that there may be two great conditions which require operative procedure with the head at the superior straight: the one requires aid but not necessarily any great haste in the delivery, while the other demands the speediest possible termination of the labor.

It seems to me that the conditions precedent and etiological to the operation give us the key by which we may answer our

question, for version, when possible, is the operation of speed although it is often more dangerous to the life of the child; while the high forceps delivery is the one which takes a longer time and does not embrace some of the certain dangers of the version. This is more apparent to us when we recall briefly the details of the two operations.

It is hardly necessary to mention the absolute necessity of perfect surgical cleanliness in the major operations of obstetrical practice as well as in every case of labor, for every labor case is a surgical operation the successful conduct of which is just as dependent upon careful aseptic preparation as any other surgical operation. Therefore, having carefully prepared the patient for the operation, which should include, also, that of the operator to do the work, the next thing is to thoroughly and adequately dilate the canal through which the child has to pass, from the vulva to the internal os. Having decided that the mother cannot or will not be allowed to do the dilatation, then it must be done by the obstetrician. If you have elected to be the force that is to deliver the child, then you are to do the work with your own hands and not with the child's head. Starting, then, at the vulva you proceed to dilate and when you think you have dilated sufficiently then dilate some more, for upon the thoroughness of the dilatation will depend, in a great measure, the success of the delivery.

When the vulva has been sufficiently dilated the vagina should be dilated until the cervix is reached. The hardest part of this division of the operation is the dilatation of the cervix, and sometimes it is almost impossible to accomplish it within the time which circumstances may demand that the labor shall be terminated. In such an instance some more radical procedure will be imperative; but if the child is delivered through the pelvis it is essential that the cervix shall be completely dilated and paralysed. Having accomplished the dilatation in a satisfactory manner the first step in either a version or forceps operation has been accomplished and we may now proceed to do whichever method of delivery under the circumstances has been determined upon. If moments are precious and the danger is more to the mother than to the child, version has probably been chosen, unless the membranes have been ruptured too long, in which case the operator passes his hand into the uterus, as a rule the left hand of the surgeon in left positions of the child and the right hand in right positions.

If the membranes have not been ruptured already, they should not be torn until the hand is well into the cervix, for the presence of a good amount of amniotic fluid renders a version much easier and safer. Passing the hand up in front of the child's face and abdomen a foot is sought. It is not necessary to waste time look-

ing for both feet, but it is generally safer to get the anterior one if possible; but if this takes too much time to determine the foot first grasped may be brought down. It will generally rotate so as to become the anterior one during the extraction. Having brought the foot out at the vulva it is grasped with a sterile towel and steady traction downward and backward is made and, as a rule, the child is delivered as far as the shoulders quite easily, but now the danger point for the child is reached and the thoroughness of the dilatation may decide its fate. If the cervix has not been completely obliterated and paralysed it is prone to shut down as the rest of the uterine muscle retracts, grasping the child by the neck and holding it beyond the time that the child can live unless, by a forceps application and a cervical rupture, you can hasten it. On the other hand, if the dilatation has been adequate, with an assistant making pressure through the abdomen the head may be delivered quite speedily. The operation of turning and extraction should not take more than five to ten minutes.

What is a high forceps operation? As before stated it is not an application to the head in the pelvis. It is an application of forceps to the head before it has engaged and is lying free or wedged at the brim of the pelvis. The same careful preparation and dilatation should precede a forceps application as the version operation. This having been accomplished the patient is ready for the direct placing of the blades of the forceps. For this a blade of sufficient length and fitted with traction rods should be used, as traction in the proper direction cannot be made without them. The head will lie almost transversely at the brim and, because of the normal curve of the bony canal, it cannot be delivered or rather pulled into the pelvis with the forceps applied to the sides of the head.

This is the one condition in which the forceps should not be applied to the sides of the head, but to the brow and mastoid and great care becomes necessary to avoid injury to the child. I have seen an interne deliver a child with an eye gouged from its socket. When the forceps have been properly adjusted traction should be made with the rods in the axis of the pelvic inlet. When the head is well drawn into the pelvis the forceps should be removed and reapplied, this time being adjusted to the sides of the child's head, when rotation is completed and the head delivered in the usual manner. Safe delivery absolutely demands the readjustment of the forceps when the head has been drawn into the pelvis. It was a failure to do this that resulted in the loss of an eye just mentioned.

Now having before our minds the conditions which render an operative delivery necessary and the details of what that opera-

tion shall consist of, we are able to take an individual case illumined by this knowledge and estimate with reasonably good judgment what procedure to adopt. A case of eclampsia or placenta prævia should indicate version if possible, while a small pelvis, large head, or uterine inertia would ordinarily mean a high forceps operation.

666 EAST AVENUE.

SELECTED ARTICLE—SPECIAL.

Some Professional Reminiscences.¹

By GEORGE F. SHRADY, M. D., New York.

(*Journal American Medical Association, February 16, 1907.*)

EVERY one who travels even an ordinary road has experiences of his own. If he can apply them to the good of any of his fellow-creatures he is serving in a very general way the common interests of humanity. There is always something, if he only turns his head in the right direction, that he may see in a new light.

At certain times we react more sharply to the controlling circumstances of environment than ordinarily. It is the question of the man, the gun, the aim and the game being in proper line. Too often, alas! we not only miss the mark, but get kicked by the recoil. Thus the physician, by virtue of his judicial office, soon learns not only to think before he speaks, but oftentimes not to say what he thinks. His face must never be the mirror of his soul. To manifest surprise at any unexpected change in the illness of a patient is to confess ignorance. Even death itself must always be viewed in the light of any other accident. To the one seeking advice it is always a comfort to know that his physician has well grounded and positive opinions. In fact, he can the better trust him when he is sure that his faithful adviser is never wrong. If it were otherwise, there would be no need for doctors. Filled with such heretical thoughts, I am tempted to relate some personal experiences substantiating them.

After finishing my hospital internship and imagining that I was well prepared for the practice of the noble art, I was summoned to a sick child in a tenement. The little one was lying in a cradle, playing quite unconcernedly with a rag doll. "Not very sick," I thought; "but what can be the matter with her?" I certainly had never seen the like symptoms before. There was a general spotted eruption over the face and other exposed places, a rasping cough, bleared, lachrymose eyes and a profuse coryza

1. Read before the Charaka Club, N. Y.

Not smallpox, I was sure, nor its reputed relation, as I had seen much of both.

"An ex-house surgeon of New York Hospital must not be worsted by such a case as this. There is one thing," said I to myself, "she is not going to die in any event." Just then the grandmother of the child came from a washtub in an adjoining corner of the room and seriously added to my embarrassment by squarely and rather disrespectfully, I thought, plumping out the question: "Dochter, what is the mather with the choild?"

For self-protection I gathered my consciousness within myself, dropped my countenance curtain, and manifested a duly abstracted air, and unconcerned manner, while I took out my prescription book and pretended to be writing. I found it very convenient at that time not to hear her question. Still she stood there defiantly, with arms akimbo, with smell of suds and look of scorn, and repeated her patronizingly insistent demand. No washerwoman had ever dared do so before.

It was nevertheless trimming to a cross sea with set sails and a gathering storm. After all, she was only repeating my query. There was one other in that room that looked for the answer more eagerly than she could imagine. To gain time he took refuge in dazed and abstracted thought, adjusted his stethoscope and mutely motioned the clamorous interloper to be silent.

The bared chest showed more spots. The patient cried in fear, and due time was consumed in quieting her. The responsibility of the situation became more and more oppressive. The sonorous grunts of my critic overwhelmed any possibly abnormal auscultatory signs. The only urgent thing was the diagnosis. The last resource was in subterfuge and hypocrisy; anything but a humiliating acknowledgment of ignorance.

Again: "Dochter, why don't you tell me what is the mather with the choild?"

"O yes," said I; "the fact is you would not understand it if I gave the name for the disease. The Latin term is *conjunctivitis*, and, of course, that would mean nothing to you."

Her supercilious and incredulous smile I shall never forget. Her rejoinder was electric. A new light dispelled the fog. "And is that the Latin name for *measles*?" said she.

I could have hugged the woman, suds and all, but my studied professional reserve came to my relief. "No, not the name for the *measles*, but I thought you wanted to know what ailed her eyes." Still the old woman unconsciously saved me from utter defeat and gave me my first clinical demonstration of the disease. Since then it has always been my religious duty to treat the grandmother in the sick room with becoming consideration.

Inasmuch as the patient is always the uncertain factor in the

equation of chances in making a prognosis, it is always safe to be on the qualifying side of possible antagonistic conditions. Thus we all learn never to be surprised at anything that may happen.

Many years ago I was treating a young lady for typhoid fever. While she was convalescing I had been absent from town for a day or two. On my return by an evening train I called to see her on my way home. It was a casual visit, and anything unusual was far from my expectation. On attempting to ring the door bell in a dimly-lighted street my hand grasped an ominous fold of crape. I looked at the number to be sure I was at the right place. "Dead! What could have happened during my absence? Possibly perforation of the bowel or internal hemorrhage. I have been away and some other man has been called in the emergency. In any event now is the time to say little and listen."

When admitted I went at once to the room, stood on the landing for a moment and heard various voices within. "They are laying out the corpse," thought I, "and my call will be a consolatory function."

In response to my knock the door was opened by the sister, who surprised me with a smiling welcome. I walked to the center of the room and saw my patient sitting by her bed!

"Oh! doctor, we are so glad you called. Josie has been longing for you for days. She wishes to ask," continued her sister, "if she can eat some oysters."

As for the astonished physician, no actual surprise must be shown. Oysters on ice instead of my patient!

"How many oysters will satisfy you?" was my question.

"Can I have six on the half shell?"

"Yes, order eight, with crackers and lemon."

Then, taking her hand in mine and patting it encouragingly, I found myself saying: "Josie, I am so glad, so glad——"

"Glad for what?" inquired she.

"Glad that you like oysters, as I was afraid that you might not be able to eat them tonight." Here truth hypocritically shook hands with policy.

When in the hall again the sister asked me if I had not been taken aback at finding crape on the bell, at the same time explaining that an old boarder had died in the room above. The dart had simply shied a little.

"Surprised? Why, no. I knew it could not have been Josie. Why should she die now when she is recovering?" Yet for the time being I was seemingly nearer to a corpse than I cared to be again. Of course, the patient never heard of the circumstance until long afterward, and luckily for her is still able to enjoy her oysters.

In my earlier journalistic experience I conceived the possibility of giving due variety to editorial functions by contributing an anonymous criticism on a paper that had been read before the Medical Society of the State of New York at Albany. The tone of the communication was as respectful and courteous as could be made by one who disputed the conclusions of the author, and asked for more light. The writer of the original article was, besides, a personal acquaintance who had an abundant ability to make a suitable reply.

As no answer came for a fortnight or more, I was somewhat chagrined by imagining that I had merely fired a blank cartridge thought on a half-rock calculation. This illusion, however, vanished in due time by the appearance of my opponent, who came specially from Albany to consult me on the propriety of his answering his critic. He was extremely anxious to know who had the temerity to differ from him, but in his excited state of mind I concluded that any direct statement to that effect should be a matter of subsequent and deliberate reflection. In any event, he wished me to help him make his arguments as striking as possible. There was, indeed, a ludicrously pathetic side of the situation that appealed to me, and I did my friendly duty by making several suggestions which he accepted with extreme satisfaction, and at the same time assuring him that he would effectually silence his presumptuous assailant.

The reply was duly published and I took occasion to congratulate him on his victory. It so happened that, his paper having received so much well-merited recognition, he was invited to elaborate it and present it to the Academy of Medicine. On that occasion a member who was always ready to discuss any subject rose and, to my great surprise, used all the points of argument contained in the anonymous attack. This was enough for the author of the paper. Turning to me with smiling satisfaction, he whispered: "At last I've found the fellow. Now watch while I wind him up."

The unconscious victim little imagined that he had short-circuited a live wire that had been charging itself for months. The result was startling and overwhelming. The Academy was spell-bound at the vehemence of the author's invective sarcasm, and when the excited speaker took his seat it was plain that the victory was entirely on his side. The only comfort for the vanquished one was complacently to blow and cool the finger that he had so foolishly put in the fire.

But this was not the end of the matter. For a long time afterward, whenever the volunteer critic appeared at the state meeting with a paper, he was sure to have one, at least, who

would take issue with him. Nor did they ever after exchange views other than at safe and respectful distance in the debating arena. The explosion of mutual antagonism had blown them so far apart that each was on the opposite side of any possible reconciliation. Nobody, however, knew better than I that both were at fault for meddling with somebody else's fireworks; and so at one of the meetings I, with an innocence I could not feel, asked my Albany friend, "Why do you always worry Dr. G.?"

"Do you not remember his published criticism of my paper on fractures?" replied he.

"But he did not write it," was the rejoinder.

"Who then?"

"It was I."

"How absurd it was," he laughingly said, "that I should have come to you, of all others, for help under the circumstances."

"Yes! But didn't I do my best to help you silence the real man?" was the only excuse I could offer.

And so in my conscience-stricken way I satisfactorily untangled a ludicrous snarl of misdirected purposes.

SELECTED ARTICLES.

Relation Between Anemia and Early Stages of Tuberculosis, with Reference to Treatment by Hypodermic Medication.¹

By B. R. SHURLY, M. D., Detroit.

[*Journal Michigan State Medical Society.*]

UNTIL a specific is obtained, the life of the tuberculous individual depends on early diagnosis and early treatment. A vast number of those infected with the pulmonary form pass through a so-called pretubercular or latent period. There is no tuberculosis without the tubercle bacilli, yet if we postpone our most strenuous efforts until the microscope reveals the lesions, the fight is beyond us. It is the cases of latent unrecognised tuberculosis with their peculiar interference of proper cell metabolism that demand more of our attention. There is frequently a prolonged prodromal period of impaired general condition that is marked by a well observed disturbance of the usual ratio between the body weight in pounds and the height in feet. A progressive loss in weight follows.

The external chest conditions, such as conformation, a limited expansion or capacity, may indicate the imperfect use of the pul-

1. Read before the Delta County Medical Society, December 14, 1906.

monary cells. The character of the pulse may give us additional evidence, such as acceleration with a relative decrease of arterial pressure. Lymphatism, with decidedly pathological tonsils, adenoids, and cervical glands, frequently exists. Will power replaces automatic power. Subjective symptoms become prominent—such as general malaise, failing digestion, weakness in the knees, and a slightly increased respiration. Where this prodromal period exists a varying degree of chloroanemia is frequently present. It is extremely marked in some cases, and the diagnosis is difficult in others.

The treatment of these anemias in associated or suspected tuberculosis is the direct subject of this paper. Medical literature provides us with many varieties of opinions upon the relations of chloroanemia and tuberculosis. It is agreed that so-called pretubercular conditions are generally attended by a diminution of hemoglobin and this is all out of proportion to the loss in red cells. Henocque characterises tubercular chloroanemias by a diminished supply of oxyhemoglobin. Incipient phthisis is usually marked by a slight leukocytosis, a slight reduction of red-blood corpuscles, and a moderate fall in hemoglobin. Twenty-nine per cent., according to Laache, of tubercular chloroanemias in the early stages show a diminished hemoglobin. Labbe regards chlorosis as a frequent first manifestation of a latent tuberculosis. Bramwell states that it is quite agreed that in families predisposed to tuberculosis, a stronger tendency to chlorosis exists. In his series of seventy-two cases of chlorosis, thirty per cent. showed definitely a tubercular family history.

It is extremely important that we should thoroughly examine and seriously treat all initial evidence of a slumbering tuberculosis. A number of patients suffering from various forms of anemias, with or without lymphatism, have come under my observation during the last two years, who have been treated with hypodermic medication of iron, arsenic, lecithin, sodium glycerophosphate, iodine, or guaiacol, in such combinations as the indications seemed to demand.

Rynd, in 1845, published in the Dublin Medical Press, the first report of medication administered under the skin. In 1850 Pravaz invented his well-known syringe that brought the hypodermic method into more general use. During the succeeding years, until 1880, only morphine and atropine seem to have had general recognition among the profession throughout the world. Roussel, of Paris, took up the work and added many new medications adapted to the subcutaneous method. The Bulletins of the French Society report the use of hypodermics of arsenic in 1883; antinyrin in 1884; salicylate of iron, arseniate of strychnine in 1886, and cyanide of mercury in 1890. During the next decade

numerous articles appeared in the French and Italian literature, and the treatment has been generally accepted for more than fifteen years as exceedingly valuable, especially where iron or arsenic is indicated. I am unable to find a single article written in English with details upon this treatment. The therapeutic nihilist of the deepest dye admits without argument that iron, arsenic, and phosphorus have a wide field of usefulness.

When these valuable drugs are introduced hypodermically into the body through the lymphatic or capillary blood systems, the effects are more pronounced, more rapid, and quite as permanent as when administered by mouth. We know that the 38-45 grains of iron that are found in the human body are for the most part in complex chemical combination with the hemoglobin. This hemoglobin, as it was formerly claimed, required organic iron in its formation, and this idea prevails in the profession today, kindly and continuously nurtured by the enterprising firms who manufacture it in fancy forms. Whatever argument may be advanced in favor of organic iron by the stomach, I am confident that the ammoniated citrate or the arseniate of iron injected hypodermically in sufficient dosage will absolutely produce complete recovery from the pathologic blood conditions known as chlorosis, and that it will be found exceedingly efficient in many cases of secondary anemia.

It is estimated that the daily average of 100 milligrams of 1-6 grain of iron is required by the average individual, while many require only 6 milligrams per diem. It is generally conceded by physiological chemists that if inorganic iron is not rapidly assimilated it stimulates the iron producing function. It is therefore probable that the hypodermic method with the use of highly soluble forms of iron supplies directly both stimulation and iron to the deficient cells. Wherever iron is indicated, it may be given hypodermically in the form of the green ammoniated citrate or the arseniate of iron. Arsenic is best administered as Fowler's solution of the arseniate or the meta-arseniate of soda. These solutions may be combined, with or without the addition of glycerophosphates of sodium or calcium. Strychnine also may be used in combination with advantage. A valuable formula in chlorosis is citrate of iron, 0.05 grams; meta-arseniate of soda, 0.01 grams; glycerophosphate of soda, 0.2 grams; strychnine sulphate, 0.001 grams.

The French glass, 30 minim syringe of Luer, with its needle of good caliber, is very useful in this treatment. It is easily sterilised with hot water and quite durable, and it is not subject to the corrosive action of the metals. A needle kept in a glass jar or box for each individual removes any danger of infection. The injections are made into the deep cellular or muscular tissues of

the buttocks or back. The stronger iron solutions are slightly painful. Chloroform or ether may be applied to the site of the puncture, if necessary. A blood examination should be made at the commencement and the completion of treatment. With a full dosage given daily an increase of ten per cent. in hemoglobin can be expected each week.

The green ammonio-citrate of iron has been used in the arts in this country to some extent, but not medicinally. It can be introduced into the system without danger in doses from 3-4 of a grain or .05 of a gram to 1.5 grains, or .1 gram daily. It is extremely soluble in water and can readily be taken up by the lymphatics and capillaries. The solution for hypodermic use must be sterilised and supplied in hermetically sealed bulbs, each containing one dose for immediate use. The splendid Italian product is preserved in cherry laurel water and imported in small white glass bulbs. Any cloudiness in the solution can be detected easily. After the patient is prepared, the slender neck of the bulb is broken, the sterile needle of our sterilised syringe is thrust into the bulb, which bulb is turned bottom side uppermost. The liquid can be then quickly drawn into the syringe.

A full dose of iron by the hypodermic method shows a reaction in from five to twenty minutes. The superficial capillaries dilate and a feeling of tension in the head is noted. Tingling sensations in the hands and feet or over the entire body may be detected. The pulse accelerates, the face is flushed, and a general feeling of well-being supervenes. In susceptible individuals or when a considerable over-dose is given, a wave of nausea follows, which may persist as continuous nausea for some hours. More than one and a half grains at a dose usually produces sudden vomiting within twenty minutes. From two and a half to five grains may produce several attacks of vomiting with great prostration for some hours. Treatment in the proper manner obviates all possibility of disturbing digestion. The teeth are preserved and no constipation results.

We recognise fresh air and forced feeding as our two sheet anchors in the treatment of tuberculosis, yet how few of our consumptives today reach the later stages of that disease without a course of creosote or its compounds in doses that have impaired the entire digestive apparatus? The conditions of the stomach will decide frequently the prognosis of our case, and tonic or palliative treatment that can be introduced hypodermically preserves the digestive tract for its proper functions. Drugs that impair digestion should be avoided.

The therapy of iron and arsenic is too well known to occupy the time of this society in argument as to the usefulness of these remedies. It suffices to say that the results of hypodermic med-

ication will speak for themselves, if you will make the trial in well indicated cases. In the treatment of anemias associated with early tuberculosis, we can remember that we need not fear a localised tuberculosis as long as fresh air, good food and reconstructives or tonics maintain a general nutrition that will preserve the cell resistance of the pulmonary gland tissues.

CONCLUSIONS.

First—This method affords a rapid, safe and certain therapy, especially where iron, arsenic, phosphorus, or iodine is indicated. It does not interfere with other plans of treatment by mouth.

Second—Chlorosis will respond rapidly to this method alone.

Third—We can avoid gastrointestinal irritation, constipation, injury to the teeth, and imperfect assimilation.

Fourth—Drugs that impair digestion should be avoided in tubercular anemias.

Fifth—We are certain that the patient receives the medicine in the dosage we desire.

Sixth—The anemic patient is continuously under observation, as an average of thirty daily punctures is required, and a definite diagnosis of suspected tuberculosis or other conditions can then be made.

Seventh—Solutions of iron introduced into the subcutaneous cellular tissue in over-doses of one and a half grains will produce nausea or vomiting within twenty minutes.

Eighth—The hypodermic use of iron and arsenic is a well established and successful method of treatment that deserves recognition in this country.

DISCUSSION.

Dr. H. J. Hartz, Detroit, said the method as announced by Dr. Shurly is one requiring expert knowledge in its successful administration, and not easily carried out by the general practitioner. There are always certain dangers in the direct inoculation of drugs into the blood, and Dr. Hartz said that he would wish to avail himself of the screening action of the liver, in the administration of iron salts.

Dr. W. E. Coates, Manistee, confessed being a therapeutic nihilist. In regard to the efficacy of hypodermic medication he thought all workers in sanatoria were unanimous in the belief that medicinal methods were of very little use except in emergencies. Over-dosing is a frequent cause of impaired digestion. Dr. Coates questioned the use of the term chlorosis in this form of anemia. Chlorosis is probably a specific disease, although it may be associated with tuberculosis in its early stage. The usual anemia is a secondary change. He believes in fresh air treatment in all cases and thinks that just as much could have been accomplished for Dr. Shurly's patients by these means.

Dr. E. L. Shurly, Detroit, said that it is the great tendency of nature to heal disease, so that the results regarding any one method of treatment are apt to be fallacious. He had personally found the hypodermic method of medication a very valuable help in treating tuberculosis. He had given a varied list of drugs in this way.

Dr. George Dock, Ann Arbor, said that the paper was interesting because it called attention to an exact method of treatment. He objected to the reintroduction of the discarded term "pretubercular," which means simply presputum stage.

The tuberculous subject is very often anemic, this anemia frequently appearing before evidence of physical signs and sputum. There is a peculiar pallor about many of these patients. The hemoglobin may test 80 per cent. when the patient looks quite as pale as a pernicious anemia patient with 30 per cent. to 40 per cent. hemoglobin. One must first make certain of the condition of the blood before drawing conclusions.

The anemia is usually secondary. It is very erroneous to consider the condition chlorosis. The tuberculous patient may look pale and not need treatment for that condition. The cases with most marked anemia may not need iron. Fresh air and diet is usually sufficient. There is no doubt but that in certain cases iron is very useful. Taken internally it can be absorbed if given in the proper form. The advantage of the hypodermic method is its accuracy and the chance for observation of the patient. There is no reason why iron should not be given in this way except that it is not necessary. Iron and arsenic can both be given satisfactorily by the mouth.

Dr. B. R. Shurly, Detroit, in closing said that the danger of infection was no greater than in giving morphine hypodermically. The advantages were the more definite dosage and prevention of irritation to the stomach. Many preparations of iron are inert, and it is always a question of how much is absorbed, unless the preparation is quite fresh. Dr. Shurly has had a number of cases in his practice who could not take iron by mouth without upsetting the stomach. In these cases, where there is chlorosis, the hypodermic method of administering iron is very valuable, such cases improving rapidly under the treatment. Dr. Shurly would not do away with other methods of treatment. Hypodermic medication does not interfere with them.

Curettage: Indications, Technique and Complications.¹

BY JOHN MILLER, M. D., Cincinnati.

Assistant to the Chair of Gynecology, Medical College of Ohio (University of Cincinnati)

[*Lancet-Clinic*, March 16, 1907.]

OF the minor gynecological operations, none is done so often and with such varying technique as curettage of the uterus. It has become such a common practice that there are few physi-

1. Read before Cincinnati Chapter Alumni Association of Medical College of Ohio.

ans and general surgeons who will not attempt it. Ever since Recamier, in 1847, introduced the operation for the removal of hypertrophied mucous membrane of the uterus, various kinds of curettes and dilators have been invented. Like all surgical instruments, the advantage or disadvantage of the curette is largely dependent upon the man behind it, upon his judgment as to the wisdom of its employment in the individual case, and as to the manner of its employment.

The operation is indicated:

First, in cases of doubtful diagnosis, in order to differentiate a malignant from a benign tumor of the interior of the uterus.

Second, in chronic endometritis, whether manifested by excessive menstruation or hemorrhage between menstrual times, or by a profuse and continuous leucorrheal discharge, which has resisted local treatment.

Third, in uterine deviations which produce symptoms, and which deviations are to be corrected at the same time by suitable operations.

Fourth, in cases of chronic endometritis accompanied by inflammatory conditions of the tubes or ovaries, provided this pathology is also removed at the same time by some operative procedure.

Fifth, to remove retained products of conception.

Sixth, in inoperable cases of cancer to remove the disintegrating tissue.

In those cases of simple or catarrhal endometritis occurring in the virgin, whose uterus is of normal size or of the undeveloped type, which does not yield to constitutional treatment, as regular habits, diet, exercise and general tonics, I would consider dilatation and curettage in preference to any local treatment. The patient, in these cases, is to be anesthetised and a thorough dilatation and curettage, with tight packing, done. Local applications very often relieve the simple endometritis in those cases to which it is applicable.

The indications for curettage are many; the contra-indications, however, are few. I quote Reed: "The first contra-indication of curettage is non-experience in uterine surgery on the part of the operator. There is probably no manipulation in surgery for the proper practice of which more dexterity, more deftness, or more of that judgment which depends on the *tactus cruditus* is demanded than curettage."

I would consider as contra-indications for curettage, active pus in the tubes, ovaries or around the uterus; acute gonorrheal endometritis and acute septic endometritis, by which I mean infection following instrumentation, or operation about the cervix or body of the uterus. Those cases in which we have retained pro-

ducts of conception, with the general symptoms of chills, fever and rapid pulse, with a foul-smelling sanguino-purulent discharge, are considered as cases of sapremia, due to absorption of the putrefactive material. These cases are relieved by removing the offending particles of placenta or membrane by means of finger or curette.

With active pus in the tubes, ovaries or around the uterus, it is a dangerous procedure to curette the uterus, because the uterus is necessarily pulled down to the vaginal orifice, adhesions are broken up more or less, and pus set free. In all cases of curettage in which an abdominal section was made immediately after a curettement, we have always observed from one-half to one ounce of serum in the lower part of the pelvis, due probably to a weeping of the peritoneum as a result of the traction made upon the uterus. This serum would be an excellent culture medium for any germs set free during an operation.

In acute septic endometritis the germs have already entered the general circulation by the time we see the patient, and we might as well try to stop the effect of the vaccine virus or the systematic infection of syphilis by excising the site of the inoculation.

Some recent statistics of Whitridge Williams and Koenig show a reduction of mortality of from 22 per cent. after curettage to 5 per cent. by means of constitutional treatment. I have curetted these cases and have lost them very promptly with general septic infection, so that now I do not curette, but simply dilate the cervix thoroughly to facilitate drainage and wash out the cavity of the uterus with a warm antiseptic solution, and in some cases place a drainage-tube in the uterus. I wash out the uterus but once, and then bend all efforts to constitutional treatment. By means of the curette, whether you use the sharp, or much worse, if you use the dull, you open up the lymph-spaces and blood-vessels and absorption takes place so rapidly that nature is not able to take care of so great an amount of poison thrown into the system so suddenly that the patient is simply overwhelmed and the leukocytes are not equal to the task, and the patient dies of sepsis, whereas, if the lymph-spaces and blood-vessels are not opened up, the poison is introduced more gradually and nature is better able to fight it off. These cases, therefore, to my mind, are better treated constitutionally, and only that which is absolutely necessary done to the uterus. Gonorrheal infection also burrows deeply into the mucous and muscular tissue, and it is impossible to eradicate the disease in its acute stage by a curettage, and that which has been said of acute septic endometritis holds good in acute gonorrheal endometritis.

PREPARATION OF THE PATIENT.

The preparation of the patient should be carried out with as much care as though a major operation is to be performed, for one never knows in which case he is going to meet with an accident which might necessitate opening the abdomen. The patient's bowels should be well moved the day before, and the morning of the operation a large enema given. The vulva and vagina should be sterilised the night before and the hair around the vulva cut short. As a general anesthetic should be used whenever curetting the uterus, it is unnecessary to mention the fact that the stomach should be empty. After the patient is anesthetised and placed on the table in the lithotomy position, the vulva and vagina are again scrubbed with green soap and sterile water and flushed with bichloride solution and the bladder catheterised. The operator and assistants should have surgically clean hands and the instruments should be sterilised by boiling.

Before commencing the operation it is best to again examine the patient bimanually, to be sure of the position of the uterus and the conditions of the surrounding structures. Sterilised towels are placed over the thighs and a perineal apron is placed across the buttocks. The cervix is now exposed by means of Sims's specula, the anterior lips of the cervix grasped by a pair of volsellum forceps. The anterior speculum is now removed and the uterus drawn down toward the vulvar orifice and held steady, keeping the long axis of the volsellum in the long axis of the vagina, using them as tractors and not as levers. The cervical canal is now mopped out with bichloride solution. If the mucous plug which is in the cervix is very tenacious, dioxogen will often remove it easily. After the cervical canal is sterilised a uterine sound is passed into the cavity of the uterus to confirm the direction of its cavity, its size and shape. The cervical canal is then dilated by means of graduated sounds, or, as is our custom, first using the smaller-size Palmer dilator and following this by a Goodell-Ellinger dilator. Much harm can be done with this powerful instrument, and one must dilate slowly and cautiously, always using the pressure of the hand and not the thumb-screw. The cervical canal is to be dilated from a half to one and one-fourth inches. Many cases of perforation of the uterus occur at the time of the dilatation, quite often because the position of the uterus is not known, the curve of the dilator being in the wrong direction. The dilator makes a separation of the muscular fibres rather than a puncture. Now that the cervix is dilated, commence to curette, always using a fairly large size, sharp curette, with flexible shank, so that it can be bent to conform with the cavity of the uterus. Take some point as a starting place and make a clean stroke with the curette from the

fundus to the internal os, being careful not to curette too deep at the internal os, for that is the place at which a stricture most frequently occurs. After you have gone over the entire cavity of the uterus with a large curette, use a small curette for the horns of the uterus. Then curette the cervical canal and around the external os. Mop the uterine cavity dry and free from mucous shreds with sterilised cotton, and then apply some antiseptic to the mucous membrane. Our preference is equal parts of tincture of iodine and carbolic acid. Before applying this to the inside of the uterus protect the vaginal portion of the cervix and the vagina by some cotton to catch any overflow of this solution. In most cases in which we do not open the abdomen, we pack the uterus tightly with iodoform gauze, which is left in the uterus from four to five days, removed sooner, however, if there is a rise of temperature to about 100 degrees. Before the patient is taken from the operating table the uterus is to be put in its normal position, a tampon being placed in the vagina in front of the cervix to retain it there. This tampon is removed the following day and a hot lysol douche given. The patient ought to remain in bed for a week.

COMPLICATIONS.

Of the complications arising during curettage none is more frequent than perforation of the uterus by the dilator or curette. The instrument may pass into the peritoneal cavity or into the broad ligament. When recognised immediately and all aseptic precautions have been taken, there need be little fear of any serious complications. I would not mop out the uterus with any antiseptic, but would pack it with sterile gauze and place an ice-bag upon the uterus and keep the patient quiet. In all my cases in which the curette has passed into the uterus an unusual distance, I believe that I have perforated, and not that it was a temporary paralysis of the uterus, as recently suggested by Meier, of Philadelphia.

By means of the powerful metallic dilators the cervix might be torn; especially might this occur if the thumb-screw is used instead of dilating by means of the hand. The treatment in these cases suggests itself. Hemorrhage, especially in cases of malignancy, might give trouble, but can generally be controlled by means of gauze packing.

CONCLUSIONS.

First, make an accurate pelvic diagnosis as to the size, position, mobility and consistency of the uterus, and determine the presence or absence of disease around the uterus.

Second, be surgically clean, use a general anesthetic and sharp curette.

Third, be competent to meet any accident which may arise.

ABSTRACTS.

How to Manage Otorrhea.

F. E. BURGEVIN, of Spiro, I. T., says (*Kansas City Medical Record*, July, 1906,) that otorrhea was formerly his bete noire. He employed the treatment of Pomeroy and others, which he learned when he was serving at the Manhattan Eye and Ear Hospital in 1890. This consisted of syringing, insufflations of powdered boric acid and the like, sometimes with benefit but rarely with cure. His present method, simple and effectual, consists of first filling the ear with a warm solution of some good peroxide of hydrogen, beginning with a 25% solution, increasing the strength every day until the pure drug is used. This of course is done only once a day. Hydrozone, which is twice as strong, he uses instead from motives of economy. After cleansing the ear thoroughly, which at first may require from twenty minutes to two hours according to the degree of foulness of the auditory canal, he then instils a few drops of warm glycozone and closes the canal securely with absorbent cotton which is allowed to remain until the next treatment.

The first cleansing should be thorough, the peroxide being repeatedly instilled until all foaming ceases. Sometimes three or four treatments will become necessary to cleanse the ear thoroughly, especially so if the lumen is occluded by swelling or inspissated discharge. Thenceforth the daily treatment need not consume more than ten to twenty minutes. In children who dread the procedure he does not attempt much the first time or two except to strive to win their confidence. This ordinarily is not difficult, the treatment being not at all painful and is followed by a certain sense of relief.

With the diseased ear once thoroughly cleansed, Burgevin considers his work as half done, thenceforth improvement being usually very rapid. Mastoid disease, necrosis, polyps and the like, of course require appropriate treatment; but he does not hesitate to declare that all uncomplicated cases may be cured by this treatment if it is properly carried out. He cautions to have the medicaments warm but not too hot—100 F. being about right. He also cautions to always stop up the ear with a bit of aseptic cotton, which should be just the size to securely close the meatus; if too large it will work out allowing the solution to escape, thus leaving the ear unprotected; if too small it will slip back into the canal, and thus thwart the effects of treatment.

Burgevin never syringes the ears in otorrhea regarding it as risky and useless. He usually drops a little warm solution of 5% sodium borate in the ear, to prevent a slight stinging which

sometimes follows after active steps and he also dries out the canal with cotton on an applicator; this latter should be done very carefully through the speculum with the canal well lighted. These, however, are nonessentials being merely refinements which render the treatment a little less unpleasant. The general health, he adds, should receive attention by appropriate treatment.

Treatment of Blennorrhea in Women.

DR. HOUSSIAU (*Annales de Polyclinique de Bruxelles*, February 1906,) observes that the folds and refolds, crypts and passages, are so numerous and so involved that an excellent opportunity is afforded for the gonococcus to find lodgment, and antiseptics are of little service as a rule. It has been well said that it is a much more dangerous disease than syphilis. Not only is blennorrhea very dangerous from the standpoint of discomfort, invalidism, and even death, but it is, unfortunately, extremely common. Its symptomatology offers very little that is new. It should not be forgotten, however, that one of the most unpleasant features of this disease is its frequent lack of symptoms, for thousands of women are affected with the disease without knowing it. As to the more frank expressions, consisting of frequent and painful micturition and the formation of pus tubes, the records of gynecology are only too emphatic. The physical signs of swollen nymphæ, red, patulous meatus, roughened and red vaginal entrance, are too well known to be reiterated, and the later manifestations, especially when the inflammation is intense, such as condylomata, ulcers of the back of the uterus, cervical endometritis, cervicitis, swollen and patulous os, all call for minute examination and thorough and painstaking treatment. Such treatment should be local and general. Internally the old reliable aromatic oils, such as sandal, etc., retain their position, while for local treatment tamponing with ichthyol affords the best results. Such tamponing may be continued even while the woman is pregnant. The author states that great care should be taken that the true ichthyol is used, as within recent years a number of so-called synthetic "ichthyols" have been put on the market under various names or "synonyms," which are nothing more nor less than sulphonated petroleum. None of these substitutes have stood the test of time, as they have at times been found to be particularly irritating, and the author is emphatic in insisting on the use of the product that is derived from the bituminous shale from Seefeld, in the Tyrol, the true ichthyol as originally produced by Unna. Permanganate of potassium solution may be used previous to the application of the tampons. After such treatment, the author finds great improvement in from ten to fifteen days, not only in the

urethritis, but also in the cervicitis, and the later instillation of a 1 to 2 per cent. solution of silver nitrate may be of service in clearing up the miscellaneous infections in the glands and urethra.—*Canadian Practitioner*.

Organic Phosphorus in Nervous Diseases.

DR. ALFRED GORDON, Associate in Nervous and Mental Diseases, Jefferson Medical College, Philadelphia, writes on the role of organic phosphorus (*Medicine*, December, 1906,) in the asthenia of nervous affections. Phosphorus exists in the brain and nerves in glycerophosphoric combination and is decomposed into inorganic compounds under mental activity, sexual excitement, and the like. Exhaustive disorders of the nervous system should be treated with organic forms of phosphorus, to restore the phosphatic loss, as inorganic forms of phosphorus are not absorbed.

Gordon used the glycerophosphates, which appear to give the best results, in 56 cases of syphilitic nervous affections, neurasthenia and insanity. In the specific cases the glycerophosphates showed the most beneficial effect on the asthenia and reenforced the mercurials and iodides, the special symptoms improving. In the neurasthenias, some of which were post-grippal, as well as in the other cases the favorable effect was pronounced. Improvement only began when the glycerophosphates were administered and ceased when they were withdrawn.

The author concludes that the glycerophosphates effected an increase in weight, improvement in strength and mental activity, and a sensation of well being. They are rapidly and completely assimilated, acting as regenerators and stimulants to nutrition and metabolism.

Arhovin in the Treatment of Gonorrhea

DR. HERNFELD, Emeritus Assistant of the Allgemeine Krankenhaus at Vienna, writes (*Therapie der Gege wart*, April, 1906,) regarding the experience of his division with the internal therapy of gonorrhea by arhovin. This chemical combination of diphenylamine and esterified thymyl-benzoic acid is absorbed a short time after ingestion, as the green reaction of the urine with Fe Cl shows. Though best administered in capsule form, it is also readily taken mixed with sugar.

Arhovin is split up in the gastrointestinal tract, its constituents passing into the urine. That excretion thus acts as a disinfectant and specifically gonocidal in the passages which are flushed by it, and besides its acidity is enhanced. In a whole series of cases in which no other medicinal or local treatment was used, arhovin indubitably effected a subsidence of the acute

inflammatory manifestations of gonorrhoea, such as swellings of the orifice, tenderness of the urethra to pressure, painful micturition; also in acute posterior urethritis there was also a rapid retrogression of the dysuric symptoms, tenesmus, chordee, and the like.

In the last six months about 40 cases were treated with arhovin in his division. In the first group there were fresh gonorrhoeas hitherto not treated, with more or less severe inflammatory symptoms. Among 25 acute gonorrhoeas there were 2 with epididymitis and 5 with considerable cystitis or posterior urethritis. All these patients bore the remedy very well; when it was alternated with sandalwood oil, the patients often complained of eructations and digestive disturbances.

In a series of prostatitis cases 6 arhovin capsules were given daily for three or four weeks after the cessation of the first irritative symptoms, with good effect. Combined with vesical lavage, it was equally successful in obstinate cystitis. Occasionally no effect was seen at first, as in three epididymitis cases; but upon continued use there was retrogression of the badly inflamed epididymis; and in a short time the strongly purulent secretion was in all cases materially diminished and in two entirely inhibited.

The favorable course of this severe complication, though all patients were ambulatory, shows that these results are not accidental. Unlike the balsams, arhovin does not aggravate the inflammation, but on the contrary is anti-inflammatory or at least indifferent. By inhibiting gonococcal growth on the mucosæ, arhovin prevents a further invasion of the urethra by inflammation-products, toxins and bacteria, so that the protective power of the testicular parenchymal cells is able to overcome the toxins already present.

The second group consists of cases of sub-chronic, protracted gonorrhoea in which there was a strong and purulent gonococcal secretion. Thus we had a case of severe urethritis of eight months' standing, with deep mucosal infiltrations in the anterior and posterior urethra. Janet's treatment was impossible on account of the thickening of the mucosa; and after each cauterisation by urethral sound there was such an intense irritation with secretion that the patient could not be treated at all for several days; but when arhovin was also used, the sounds were well borne. Under this combined treatment the secretion lessened to a minimum, so that the results were excellent. Similar observations were made in two other cases with regard to the eminent secretion-limiting effect of arhovin in the posterior urethra and the region of the vesical neck, in chronic gonorrhoea with involvement of the prostate; in these there is always increase of the

secretion and urinary cloudiness after local treatment, until arhovin internally was also given. Then the characteristic favorable effects noted elsewhere followed.

In three other chronic cases, anterior and posterior, with inflammatory symptoms, arhovin was advantageously used after other internal remedies had failed, and in a series of phosphaturia cases it seemed to clear the urine. In severe cystitis, which had for some time received silver nitrate irrigations, the use of arhovin was followed in a few days by clearing of the very cloudy urine.

Local Anesthesia by Eucaine in Rectal Diseases

CHARLES B. KELSEY, Surgeon at the Post-Graduate Hospital, New York, in a paper on "The Office Treatment of Diseases of the Rectum, with a Description of Some New Methods," (*Medical Record*, October 21, 1905,) recommends the use of local anesthesia in rectal diseases. When eucaine became known, cocaine was abandoned, the former having equal effect with much less constitutional disturbance.

The recent exploiting of simple water as a local anesthetic has not appealed to him. It is certainly not new, for it has been a scientific curiosity for years; but the practical advantage of injecting an ounce of water into the tissues to secure an effect that can as well be gained by ten drops of a very weak and absolutely safe solution of eucaine is not manifest, while the disadvantages are obvious. Moreover, eucaine in many cases can be efficiently applied on a piece of cotton allowed to rest on the spot and need not be injected into the tissues at all to produce full anesthesia.

Thus, he bathes fissure in strong eucaine, or injects a weaker eucaine under it, till all sensation is abolished, and incises freely. Eucaine anesthesia is equally useful in cases of pruritus ani and of fistula, as well as in hemorrhoids, where he does galvano cautery.

He found a distinct advantage in using eucaine instead of general anesthesia, especially in old or very nervous and timid patients, in cases where the tumors can easily be brought outside the anus and the surgeon's work is all before him.

Colloid Silver in Acute Gonorrhea

S. LEON GANS, M.D., Instructor of Genito-Urinary Diseases in the Medico-Chirurgical College, Philadelphia, publishes his extensive experience with colloid silver in acute gonorrhea. (*Medical Bulletin*, February, 1907). From his study of 132 cases he concludes: Instillations of the drug never caused subjective symptoms of irritation. The most striking feature in the entire series was the absence of epididymitis in all cases. There were

no complications in any case, unless posterior urethritis is so designated; and this was minimised. All cases ran a much shorter course than under other plans of treatment. The long stage of decline was conspicuous by its absence. There was no sudden cessation of the acute discharge followed by a persistent mucoid exudate, as with many cases treated by the old irrigation methods.

Three to five per cent. collargolum solutions with mucilage sassafras med., being preferable to watery solutions, were injected as soon as the patients presented themselves. The instillation is made with the greatest care and gentleness four times a day, immediately after urination, the instillator being placed just within the compressor urethræ muscle. This insures medication of the infected membranous and prostatic urethra; if introduced farther the instillator deposits the fluid on the base of the bladder, which is rarely at fault. The solution is held five minutes, the meatus being compressed laterally. The urine should be watched, and persistent turbidity not due to phosphates or urates is an indication to decrease the strength of the solution. Number and concentration of the injections should be adapted to the individual needs.

Thirty minutes after a five per cent. collargolum solution had been thrown in and held five minutes, a normal urethra was examined with a straight tube endoscope with an electric bulb. The mucous membrane was found to be stained brown and to have a peculiar lustre, and small areas of normal tissues were apparent at irregular intervals. The author appends a table which shows the characteristic effects of collargolum in twelve typical cases taken at random.

CORRESPONDENCE

The Raybrook Hospital for Incipient Consumptives.

The New York State Hospital for Incipient Tuberculosis, located at Raybrook in the Adirondacks, finds difficulty in securing suitable cases to fill the beds established. The superintendent explains the situation in the letter which follows.

To the Medical Profession of New York State:

At the New York State Hospital for Incipient Tuberculosis there are 35 vacant beds. This is due to the fact that suitable cases for treatment, and for which the hospital was built, cannot be secured. Out of 940 applications for admission to the hospital last year 220 patients were, following examination, received for treatment, the remaining 720 being too far advanced to be accepted. Of the 220 received 65% only were actually incipient cases. The balance, on admission, were found to be suf-

fering from more advanced disease and were re-classified at the hospital. This condition, considering the well known curability of the disease in question in its early stages, should not exist in New York State today, where annually 14,000 people die of tuberculosis. There are approximately 50,000 consumptives in the state. Thousands of these must be in the incipient stage, losing all chance of recovery.

One of the chief purposes of the New York State Hospital is educational, it being designed to encourage early diagnosis and to supply the only ideal form of prevention while saving life. It would seem that incipient tuberculosis is an unknown, unrecognised disease, except by a few experts.

In the last annual report of this hospital it is shown that 85% of incipient cases were discharged apparently recovered. This class constituted 65% of all cases under treatment. Of the moderately advanced cases 23% were discharged apparently recovered and of the advanced cases no per cent. were so discharged. The possibility of obtaining good results is plainly seen, therefore, to depend in the main upon the amount of tuberculosis present when the case is placed under treatment.

The definition of an incipient case, as adopted by the National Society for the Study and Prevention of Tuberculosis, is as follows:

"Slight initial lesion in the form of infiltration limited to the apex or a small part of one lobe. No tuberculous complications. Slight or no constitutional symptoms (particularly including gastric or intestinal disturbance or rapid loss of weight). Slight or no elevation of temperature or acceleration of pulse at any time during the twenty-four hours, especially after rest. Expectoration usually small in amount or absent. Tubercle bacilli may be present or absent."

This is the class of cases we desire to receive to the full working capacity of the institution.

The Board of Trustees of the New York State Hospital for Incipient Tuberculosis have authorised the publication of this letter, feeling it their duty to acquaint the medical profession with the surprising conditions existing in the State at this time regarding tuberculosis and its prevention and treatment.

Signed: M. P. BURNHAM, M.D., Superintendent.

Board of Trustees—

ELMER E. LARKIN, M.D.

MARTIN E. MCCLARY.

REV. J. BANCROFT DEVINS, D.D.

EDWARD R. RICE.

JOHN H. PRYOR, M.D.

RAYBROOK, N. Y., March 13, 1907.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 238 DELAWARE AVE., BUFFALO, N. Y.

VOL. LXII.

APRIL, 1907.

No. 9

Typhoid Fever and Filtration.

IT is an undisputed scientific fact that typhoid fever is a water borne disease in large part; but it is an equally undisputed fact that typhoid disease is communicated through other channels. For example, contaminated oysters have been charged with disseminating the disease, while milk is another medium through which the germs of the malady are distributed.

It is important, however, that the water supply of a large city should be placed above suspicion, since drinking water constitutes the greater medium of infection. Filtration is one of the methods offered to purify the water supply of Buffalo and if we may judge by the results at Albany, it ought to prove adequate. The experience at Washington, however, may be cited as somewhat unusual after the establishment of a filtration plant. This improvement took two years of time and cost \$3,000,000 to construct, being finished in October, 1905. It met the approbation of sanitary experts and gave hope that the difficulty was removed. It was soon discovered, however, that the death rate from typhoid for a portion of the year following the establishment of the plant was as great as for a corresponding period in the previous year. This created a suspicion that the filters were imperfect or were not a safeguard against the spread of typhoid disease.

It was a serious indictment against filtration if true, and led the "Engineering News" to investigate the entire problem. Mr. Theodore Horton, consulting engineer of the New York State Department of Health, was engaged to go over in detail the conditions prevailing at Washington and his report is an interesting one for several reasons. He points with emphasis to the fact that drinking water is not the only medium for the dissemination of typhoid germs; he expresses the opinion that con-

taminated oysters have contributed to the infection at Washington; he thinks the milk supply, though rather closely watched, is not guarded sufficiently; that some of the water consumed in the city is taken from shallow wells; and, finally, he suggests that southern cities fare worse than northern cities in relation to typhoid disease and assigns Washington to the former class.

We have invited attention to this matter because we deem it important that every available light should be turned on the screen while the subject is under advisement in Buffalo. We do not cite the experience at Washington as a reason for discouragement so far as the establishment of a filtration plant is concerned, but rather to caution against a too sanguine expectation that typhoid fever will disappear entirely and immediately after such a plant is installed.

Whatever is done to improve the quality of our water supply should have the approval of sanitary experts and engineers of the first order. Nor must it be forgotten that there always remains in a large city what has been called "residual typhoid": that is to say, a number of cases will always lurk in the nooks and crannies of a great city, sometimes even in its best residential quarters. A few such come from other cities and towns, through the incidents of travel or the fluctuation of population.

It is not unreasonable to indulge the hope, in spite of all the difficulties in the way, that some method will be evolved which will give to Buffalo the most complete, adequate, and sanitary water supply yet instituted in a populous city.

BUT while Buffalo is striving to put its water supply on a high sanitary plane, she must not forget the injustice of contaminating waters that go to neighboring cities or towns. To dump the sewage of this large and ever growing city, now numbering, conservatively speaking, 400,000 souls, into the Niagara river and thus contaminate the source from which Tonawanda and Niagara Falls must needs take their water supplies, is not only an injustice but comes very near being a crime. Now that the Passaic river, whose waters have so long been befouled between Paterson and Newark, is about to be cleansed by withholding the sewage heretofore dumped into it by the town and cities along its borders, especially Paterson, is it not high time for Buffalo to clear its own skirts of the charge of increasing the typhoid rates of its neighbors downstream?

It is not pleasant to scold one's own city for its shortcomings but it is only fair that these should be pointed out, now and then, lest they be overlooked to its disadvantage in comparison with its neighbors of the same class. In the controversy growing out of

repeated attempts to establish a union railway station, the rivalry which is almost a quarrel between the east and west sides, has permitted us to continue a disgrace, so far as our railway stations are concerned, that has become almost intolerable. Buffalo, too, permitted itself to be inveigled, if not swindled, into establishing its postoffice site in a side street in the midst of an environment that is disgraceful, to say the least.

Cleveland, our sister city, on the other hand, with far less lake and railway advantages, locates its government building, its municipal offices and its great railway station on a plaza in the very center of its best locality. The buildings, too, represent the very highest type of architectural beauty and usefulness. Is it any wonder, then, that Cleveland has outstripped Buffalo in its growth, not only of population but of financial prosperity and its growth, not only of population but of financial prosperity, and in its cultivation of the arts and sciences as well as in the esthetics of civic standards? And this, too, with lesser commercial advantages and of inferior railway facilities!

DR. ERNEST WENDE, health commissioner, is leading a crusade against pipeless stoves and it is reported that Corporation Counsel Desbecker is now preparing an ordinance prohibiting the sale or use of gas stoves which do not provide for connection with a flue. The recent death of two women, sisters, from gas asphyxia, has awakened interest in this subject and we trust the common council will not be slow in approving the ordinance in question. It is distinctly a measure, humane and necessary, to prevent a recurrence of deaths from such a cause.

THE "BUFFALO EXPRESS," in its edition of March 13, 1907, says: "The man who spits on a sidewalk is a swine. If public opinion in Buffalo would not support the enforcement of an ordinance forbidding such a filthy offense, shame on Buffalo!"

Dr. William C. Callanan, alderman of the twentieth ward, offered a resolution in the aldermanic board recently, extending to public walks the ordinance that now prohibits spitting in street cars and public buildings. No opposition should be made to this measure, it being distinctly in line with approved reform in municipal sanitation.

DR. HERBERT CLAIBORNE, of New York, says the Philadelphia Record, suffers from cold hands in winter. And nothing will warm his fingers except hot water, a hot fire or a hot potato. He can be seen almost any frosty morning marching along at five miles an hour with a hot potato in each overcoat pocket and

his hands grasping the two big potatoes, piping hot, wrapped in silk handkerchiefs, for this purpose. "They will keep your hands warm for hours unless you happen to sit on 'em," he says. "They are great for a football match or when you go sleighriding."

PERSONAL.

DR. J. H. WHITE, of the United States Public Health and Marine Hospital Service, who directed the campaign which stamped out yellow fever in New Orleans in 1905, has received an appointment as supervising inspector of maritime quarantine in Louisiana, Mississippi and the Central American fruit ports from Surgeon General Wyman, of the Marine Hospital Service. Dr. White's appointment is a step in establishing the national quarantine in Louisiana, supplanting the state system.

DR. CARLOS E. BOWMAN, of Alden, Erie County, N. Y., was recently elected president of that village. He has practised his profession there for over twenty years and is spoken of as one of the most respected citizens of Alden. He is and has been for a number of years health officer of the village and takes an active interest in public affairs.

DR. I. A. M. DIKE, of York, Livingston County, N. Y., was re-elected supervisor at the recent spring election. Dr. Dike has practised his profession in that town for more than twenty-five years and is one of the prominent citizens of that community.

DR. VERTNER KENERSON, of Buffalo, captain and assistant surgeon in the 74th regiment of infantry, N.Y.N.G., will resign his commission, it is announced, at an early day. His successor has not been determined upon.

DR. PRESCOTT LE BRETON, of Buffalo, May 1, 1907, will remove from 20 Carlton Street to 23 Irving Place, where he will establish his residence and offices. Hours: 9 to 11 and 1 to 2.

OBITUARY.

PROFESSOR VON BERGMANN, the famous surgeon, died at Wiesbaden, March 25, 1907. He was operated upon the day before for intestinal disorder without an anesthetic and bore the prolonged cutting with the greatest fortitude, although he did not direct the surgery, as was the case in a previous operation a few months ago. The dead surgeon was the greatest authority on gunshot wounds in Germany.

Ernst von Bergmann was born in the Russian Baltic province of Livonia, December 16, 1836. He studied medicine at the universities of Dorpat, Vienna and Berlin, and was graduated from the medical department of Dorpat in 1864. During the Austro-Prussian War of 1866 he was placed in charge of the military hospital at Königinhof, in Bohemia, and during the Franco-Prussian War he was at the head of the military hospitals of Mannheim and Karlsruhe. In 1875 he was appointed to the chair of surgery in the University of Dorpat, remaining there until the breaking out of the Turco-Russian War, when he became attached to the Russian Army of the Danube as consulting physician. Returning to Germany, Dr. von Bergmann was made surgeon in chief of the hospital at Würzburg and professor of surgery at the university. In 1882 he was called to the chair of surgery at the University of Berlin, to succeed Professor von Langenbeck, and also had charge of the surgical clinic of that city.

When, on December 16, 1906, Dr. von Bergmann attained the age of seventy the event was made the occasion of a notable celebration. No fewer than forty delegations called on him during the day to pay their respects. For five hours they filed past him, among them representatives of many universities, of the Red Cross, of various medical societies and other associations and of the German Samaritan Society. In recognition of his valuable services in war time and to education the ministers of War and Education were represented by government officials of high rank. Four important scientific works were published to commemorate the anniversary and Dr. von Bergmann's services to surgery. At a dinner in his honor in the evening more than five hundred prominent persons were present by invitation of the Berlin Medical Society.

Not only was Dr. von Bergmann a great surgeon and scientist, but his far reaching sympathies extended into many other fields. He was an ardent lover of art, of music and of the drama; while, as one writer has said of him, "he was recognised as one of the leaders among those who work for the public weal." He was a pioneer in antiseptic surgery, and made notable advances in investigation of diseases of the brain.

The professional activities of Dr. von Bergmann were continued up to a recent date. In May, 1906, he was called to Constantinople, in consultation, during the illness of the Sultan's daughter, Sultana Ayisheh; in July he presided at a special meeting of the Berlin Medical Association, called to discuss the treatment of appendicitis; in August he was once more summoned to Turkey, this time to attend the Sultan himself, and early in 1907 he treated the late Shah of Persia, for which he is said to have

received a fee of \$22,000. He was the author of numerous treatises on surgery, among them "Zur Lehre von der Fettembolie," "Die Resultate der Gelenkresektionen im Kriege," "Die Lehre von den Kopfverletzungen" and "Die Chirurgische Behandlung von Hirnkrankheiten."

DR. WILLIAM B. THOMAS, of Ionia, Mich., died at his home March 5, 1907, aged 75 years. He graduated at the medical department, University of Buffalo, in 1857; he served during the civil war as surgeon of the 21st regiment, Michigan infantry volunteers; he was appointed United States marshal for the western district of Michigan in 1866, and five years afterward became superintendent of schools for Ionia County. He practised medicine about fifty years in Ionia, and became an invalid by reason of a fall received several years before his death.

DR. ELBERT W. LA WALL, of Scio, N. Y., died at his home in that village February 22, 1907, of heart disease, aged 33 years. He graduated in medicine at the University of Buffalo in 1897.

SOCIETY MEETINGS

Buffalo Nurses Association.

[Trained Nurse and Hospital Review.]

THE annual banquet of the Buffalo Nurses' Association was held the evening of the sixteenth of January, in Miss Vincent's tea rooms, and was one of the most delightful social affairs ever held by that body.

The honor guests were Mrs. Frank Shuler, president of the Western Federation; Dr. Maud J. Frye, an honorary member, and Mrs. Henry Altman, chairman of the educational committee of the City Federation. Much regret was expressed over the absence of Mrs. Annette Sumner Rose, who had been especially invited, and many nurses who had met Mrs. Rose on previous visits to Buffalo hoped to renew the friendship. A telegram was received from Mrs. Rose announcing her inability to be present and was read at the tables, and it was voted that a letter of regret should be sent to her.

The tables were decorated in green and white, tiny pine trees with frost-like effects giving a most pleasing appearance; the favors were medicine glasses filled with green and white confections and tied with green and white ribbons. Place cards with green clover designs and each one with a suitable quotation marked the places.

Between courses the nurses enjoyed dancing Sir Roger de Coverly and apparently a few preferred the dance to the dinner.

Miss Mary Jayne Cole, the president, acted as toastmistress.

Dr. Maud J. Frye responded to the toast "The Patient," as follows:

DR. FRYE'S RESPONSE.

I am to say a few words to you tonight in behalf of the one on whom both nurses and doctors depend for daily bread—the patient.

A very wise physician has said no physician should be allowed to practise medicine till he has had typhoid fever. Acting upon his advice, at the end of my year as a hospital interne I took a two-months' post-graduate course in typhoid. I have never regretted the time I spent. I learned more practical medicine than in any other two months of my entire student or professional life, and I have once or twice since had occasion to observe the practice of medicine from the patient's standpoint. It is not alone medicine which I have learned during these enforced periods of study. There is no better way to learn nursing.

I would not go so far as to advise a nurse before undertaking her chosen work outside her hospital training school, to deliberately inoculate herself with typhoid, measles, influenza or mumps, merely to make her training complete, but I believe that each and every illness that befalls her, will tend to make her a better nurse. One learns when one's own back is aching why it is sometimes so difficult to adjust the pillows right. The restfulness of absolute quiet will never be appreciated to the full, except by the one who has herself been hurt—from the blows of sound. Then, too, the things you learn about sick-room visitors when you yourself are the visitée! How you would like them all to adopt the motto: "Be Brief." The sensitiveness of the average invalid is something which the well seldom appreciate. Laugh *with* your patient as much as you will, but don't laugh *at* her. Most of all when your own personal and family secrets are of necessity laid bare to stranger eyes, how you will appreciate the nurse who has learned to hold her tongue. How do you know her? A dog who fetches a bone will carry a bone. If your nurse gossips to you of one and another patient and her affairs, will she not also in turn discuss yours?

Your nurses' association serves among other good purposes to interest its members in something outside the sick-room, and I would urge you all to avail yourselves of the opportunities which it affords, and of all other opportunities which offer, for intellectual and social enjoyment and improvement, not only for your own sakes, but that you may be able to interest your patients without being gossips, bright without being malicious. Last and

best of all sickness teaches you how much a good nurse comes to be loved by those she cares for. You will never fully understand the mingled feeling of dependence and gratitude and absolute confidence with which it is your privilege sometimes to be regarded, until you have been cared for by a woman worthy of such regard. I have some tender memories treasured up of women who have nursed me and mine in critical illness. Sympathetic without being depressing, cheerful and even merry without being frivolous, brave and unselfish and untiring, their price is above rubies. When you come to take the special course in nursing which I have advised, may you fall into such hands.

Miss Katherine Meagher spoke on "The Helping Hand;" Mrs. J. L. Brodie "The Club-woman," and Mrs. Storck gave a toast which had been prepared by Miss Ten Eyck, but who was unable to be present, "Tell me why when asked a question you will always answer No?"

Miss Mary Swartz responded to the toast "Looking Forward," and Miss Nye spoke on "Looking Backward."

Mrs. Frank Shuler talked on the work of the Western Federation and of the place the nursing profession holds and should hold in civic life. Mrs. Altman told of securing medical inspection in the public schools.

The arrangements for the banquet were made by Mrs. Jennie T. Anderson and Miss Adella Walters.

Medical Society of the County of Erie.

[Reported by Franklin C. Gram, M. D. Secretary.]

A SPECIAL MEETING of the Medical Society of the County of Erie was held at the University Club, Buffalo, February 19, 1907, at 4:30 p. m., for the purpose of considering a bill creating a single state board of medical examiners.

After a discussion of the bill, it was moved by Dr. Hubbell, seconded by Dr. Lytle, and

Resolved, that the Medical Society of the County of Erie is in favor of the enactment of Senate Bill No. 154 and Assembly Bill No. 160, which provides a single examining board for the licensing of practitioners of medicine in the state of New York.

The resolution was unanimously adopted.

On motion of Dr. Krauss, the secretary was directed to send a typewritten copy of this resolution, by special delivery, to each member of the Public Health Committee of the senate and assembly.

On motion of Drs. Hubbell and Benedict, Dr. Edward Clark and Dr. William C. Krauss were appointed delegates to represent this society at the hearing in Albany.

Dr. A. A. Hubbell and Dr. F. E. Fronczak were appointed alternates.

On motion of Dr. Bennett, it was voted that the actual expenses of the delegates be paid by the society.

Adjourned.

THE initial meeting of the Women's Medical Society of the State of New York was held at the Genesee Valley Club, Rochester, the evening of March 11, 1907. There were 48 women physicians in attendance from different sections of the state, 17 of whom were from Buffalo. The proceedings included a banquet at which Dr. Ida C. Bender of Buffalo acted as toastmaster. The chief speaker and guest of honor was Dr. Sarah R. A. Dolley of Rochester, the second woman physician in the state. She was graduated from the Central Medical College of Syracuse and Rochester in 1851.

Among the speakers was Dr. M. Elizabeth Schugens, who spoke on liberty, equality and fraternity. Those attending from Buffalo included Ida C. Bender, who was toastmistress, Mary I. Denton, Elizabeth Dort, Jane North Frear, Maude J. Frye, Edith Hatch, Jeanette P. Himmelsbach, Regina Flood Keyes, Helene Kuhlman, Marion Marsh, Kathrine S. Munhall, Lillian Craig Randall, Electa B. Whipple, Marie S. Wolcott, M. Elizabeth Schugens, Mary H. Sloan, and Amelia Earle Trant.

The preliminary work of organisation was completed by committees and formally adopted.

President, Sarah R. A. Dolley; first vice-president, Electa B. Whipple, Buffalo; second vice-president, Mary H. Cotton, New York; third vice-president, Mary T. Greene, Castile; secretary, Eveline P. Ballentine, Rochester; treasurer, May Allen, Rochester.

THE BUFFALO ACADEMY OF MEDICINE held meetings during the month of March as follows:

Section on Surgery.—Tuesday evening, March 5. Program:

(a) A working formula for the treatment of intraperitoneal infection, William B. Jones, Attending Surgeon St. Mary's Hospital, Rochester, N. Y.; (b) Typhoid ulceration, John Parmenter.

Section on Medicine.—Tuesday evening, March 12. Program:

(a) Pleural effusions and a safe and easy means of drainage in purulent cases without resection of rib, Albert J. Colton; (b) Concerning chylo-thorax, Dewitt H. Sherman; (c) Some questions involved in sending a patient away from home, John H. Pryor.

Section on Obstetrics and Gynecology.—Tuesday evening, March 19. Program: (a) Postpartum hemorrhage, Ludwig Schroeter; (b) Acute general peritonitis, Francis W. McGuire.

A Stated Meeting of the Academy was held Tuesday evening, March 26, at which nominations for officers for ensuing year for president, secretary, treasurer and one trustee was made. The Section on Pathology furnished the program: Formation of gall stones, J. George Adami, of Montreal, Canada.

THE NATIONAL ASSOCIATION OF UNITED STATES PENSION EXAMINING SURGEONS will hold its sixth annual meeting at Washington, D. C., during the session of the Seventh Congress of American Physicians and Surgeons, which begins May 7, 1907. At the time this notice is sent to press the precise day of meeting has not been announced, but we conclude that, according to precedent, the sessions will be held Wednesday and Thursday, May 7 and 8.

THE AMERICAN CONGRESS OF PHYSICIANS AND SURGEONS will hold its seventh triennial session at Washington, D. C., Tuesday, Wednesday and Thursday, May 7, 8, and 9, 1907. The subject for the second day is, The Comparative Value of Medical and Surgical Treatment of the Immediate and Remote Results of Ulcer of the Stomach, by John H. Musser, Charles G. Stockton, John H. Munro and William J. Mayo. Discussion by Mr. B. G. A. Moynihan, Leeds, and A. Jacobi, New York.

THE PHILIPPINE ISLANDS MEDICAL ASSOCIATION held its fourth annual meeting at Manila, February 27, 28, and March 1, 2, 1907, under the presidency of Dr. Paul C. Freer. An elaborate and interesting program was received by the Journal March 25, which courtesy we hereby acknowledge with best thanks.

THE AMERICAN MEDICAL ASSOCIATION will hold its sixtieth annual meeting at Atlantic City, Tuesday, Wednesday, and Thursday, and Friday, June 4-7, 1907, under the administration of President William J. Mayo, of Rochester, Minn., and President-elect Joseph D. Bryant, of New York.

THE SIXTH INTERNATIONAL DERMATOLOGICAL CONGRESS will be held September 9-14, 1907, at the Academy of Medicine, 17 West 43d Street, New York, under the presidency of Dr. William J. White, of Boston. Dr. Grover W. Wende, of Buffalo, is a member of the organisation committee.

COLLEGE AND HOSPITAL NOTES.

THE Riverside Accident Hospital Dispensary, Buffalo, was the recipient of a benefit given at Orient Hall early in March, 1907, which was attended by about 200 persons. The guests were received by Dr. Lillian Craig Randall and Mrs. Charles P. Chapin.

THE Buffalo Children's Hospital was recently the recipient of \$10,000, contributed to the endowment fund by Mr. William A. Rogers. It has been previously announced in these columns that Miss Martha T. Williams last summer gave the present site of the hospital and the building now used for patients. Mrs. Charles W. Pardee gave the funds for a new building some weeks ago,, which will cost \$75,000 to \$100,000. The new structure will be a fireproof building, work upon which will be started very soon.

BOOKS AND AUTHORS.

The Muscles of the Eye. By **Lucien Howe**, M.A., M.D., Professor of Ophthalmology, University of Buffalo, Member of the Royal College of Surgeons of England, Member of the Ophthalmologische Gesellschaft, of the Société Française D'Ophthalmologie, and of the Ophthalmological Society of the United Kingdom; former President, Sec. Ophthalmology, American Medical Association. In two volumes. Volume I. Anatomy and Physiology, including instruments for testing and methods of measurement. Illustrated. 8 vo. pp. xii-470. New York and London: G. P. Putnam's Sons. 1907. (Price, Cloth, \$4.25).

One of the important medical and scientific literary events of the year is the publication of the first volume of the work of Dr. Lucien Howe, of Buffalo, on "The Muscles of the Eye." The subject is one which has especially engaged his attention for many years, and to which he has given much study and extended experimentation. This product of his pen, carefully prepared, is a summary record of the conclusions and labors of others in the same field, of his verification and amplification of their findings, in which is embodied also the devices, methods and results which are peculiarly his own. He has approached his task with an open mind, unbiased and unobscured by any fad or preconceived theory. Armed by a comprehensive knowledge of the works of others throughout the world, he has experimented intelligently, he has chosen his facts and written them up discriminately and judiciously, thus presenting a valuable treatise, the first part of which is the subject of this review.

This volume deals with the anatomy and physiology of the ocular muscles, with frequent and pertinent references to the relation of anatomical conditions and functional processes to

pathological states and clinical considerations. In the first part, assigned to the anatomy, there are five chapters. Chapter one treats of the ocular muscles and their dissection, and describes them as to their origin, direction, insertion, both primary and secondary, size, variations, and the like, all in clear and concise terms. In the second chapter there is an equally satisfactory description of the intraocular muscles and other structures concerned in accommodation, including the ciliary muscle, ligament of Zinn, the structure of the lens, the position of the lens and the methods of determining it, the imperfections of the refractive media which influence the ciliary muscle, the clinical importance of the refractive media, and the accessory muscles of accommodation. The third chapter contains a good outline of the nerve supply of the ocular muscles, including the sympathetic, and of the arrangement of the cells in the various nuclei, together with their relations and connections. The fourth chapter is devoted to the blood supply, and chapter five to the comparative anatomy and embryology of these muscles.

Part second, the physiology of the ocular muscles is by far the larger portion of the book, and attacks some of the most complex physiological problems. In endeavoring to solve some of these, the author exhibits his genius in the devising of instruments and methods to facilitate their study, and while he does not claim to have fully and satisfactorily found answers, yet by the amalgamation, if we may use the term, of the results of his own labors and those of others, as he has done here, he has certainly come nearer to such a consummation.

Our limits will not permit a detail reference to the many subjects discussed in this highly interesting part of the book, or to the author's special contributions. It must suffice to indicate only a few of them in the most general manner. There are eleven chapters with several subdivisions, and in these are considered, first, one eye at rest, which reviews those fundamental principles relating to the rotation of the globe in different directions by the different muscles. In this connection, the author, by modifying the ordinary Javal-Schiötz ophthalmometer, found that it was possible to determine, quite exactly, the center of motion of the eye. Following this chapter is one on one eye in action, but not necessarily in motion, as in accommodation. In this also is considered the mechanism of accommodation, and the theories regarding it, the pupillary reactions, and the action of cycloplegics and myotics, together with the measurement of their effects in their maximum and minimum doses, by which measurements the author hopes to assist in determining whether there exists a tendency to excessive or insufficient accommodation.

The next chapter under the heading, one eye in motion, considers the manner in which the extraocular muscles move the globe, and attention is confined, first, to the motion of one eye only, eliminating all forms of associated movements, and study-

ing the action of a single muscle. For the first time, the lifting power of the adductors and the tensile strength of the recti muscles are noted, the measurements being made by a method which is original with the author. In this chapter he also studies, quite at length, the limit of the field of fixation as determined by the tropometer and the perimeter with certain improvements that he found he could make. Due emphasis is properly given to the clinical bearings of a knowledge of this limit.

Following this is a chapter on both eyes at rest, in which the author undertakes to measure the interocular base line and to determine the position of rest of the visual axes and the position of the vertical axes. In this connection he describes what he calls physiological heterophoria and the various instruments for determining the position of rest, such as the phorometer, Maddox rod, clinoscope, and the like.

The fifth chapter takes up that group of movements which is described under the general heading, both eyes in motion. It is divided into four groups of associated movements. In the first group, the visual axes being in the primary position, the vertical axes may turn in or out. The second group of motions includes those in which the parallel visual axes move in some one of the principal meridians,—up, down, in, or out. In the third group are those movements in which the visual axes move obliquely from the primary position into some secondary position. The fourth group of associated movements, which is regarded as the most important in its clinical aspects, is studied in five subdivisions. As a preliminary step to the study of this group, the well known facts relating to ophthalmological prisms are reviewed, the meaning of the meter angle is defined, and the size of it is expressed in degrees with exactness, and a table of degrees in terms of the meter angle is constructed. There is also established the difference between the minimum and maximum fusion power, a point of no small clinical importance.

From these considerations, the author passes to a study of the variations in accommodation with a given degree of convergence (relative accommodation), illustrating it graphically, and ascertaining how the measurement of relative accommodation is made. He shows how relative accommodation is influenced by increased age. After thus discussing relative accommodation, he takes up relative convergence, describing what it is, how it is measured, and what degree of exactness is necessary for clinical purposes. Finally, he examines the true torsion which accompanies convergence and what may be called relative torsion.

After enlarging upon these subjects at considerable length, and with his characteristic exactness of definition, he decides that in the act of comfortable vision for the near point, we have to deal with three principal factors, namely, accommodation, convergence and torsion.

The conclusions at which the author finally arrives are: first, that a thorough study of the anatomy and physiology of the ocular muscles is essential to a working knowledge of their pathology; second, that more exact definitions of much of the anatomy and physiology of the ocular muscles are necessary, if we would clear up in any way our confusion of ideas concerning them; third, that we need greater uniformity in methods of examination. No matter whether a test is made of the static or dynamic condition, or whether measurements are made of the power of accommodation or of convergence or of torsion, or of any of these with reference to the other, we should agree on certain procedures to be adopted; or, if that cannot be done, then each ophthalmologist should describe his methods in his own records for his own convenience, or surely, when writing for others. Fourth, that the practitioner must make his clinical examinations much more thorough than is usual, if he wishes to obtain a sufficient number of data upon which to base a valid opinion.

Following the text proper, are three appendices. The first appendix is a bibliography for this volume and contains eight hundred and thirty-two references to articles and books on the various phases of anatomy and physiology of ocular muscles. This bibliography is of inestimable value to any one who desires to study this subject. In appendix B, the author has listed a series of questions which will indicate to the ophthalmological student some problems which are not yet solved. They should act as a stimulus to the making of researches that need to be pursued in the future. Appendix B tells the reader in what libraries of the United States the important ophthalmological journals of the world may be found. The last appendix contains biographical notes with portraits of Brewster, Helmholtz, Donders, Ewald, Nagel, Le Conte, Hess and Tscherning. Finally, very complete indices render references to the text easy,—a most desirable feature.

The above gives a very inadequate view of the contents of this work. To be appreciated it should be studied. Other works have been written on the muscles of the eye, but there is none which attempts to cover the field in so complete and impartial a manner as does this one.

The book is amply illustrated, both in black and color, and in every way is a fine specimen of bookmaking. The author is to be congratulated upon the success which he has attained in giving such a full and clear presentation of a difficult and obscure subject. The profession will look forward with eager interest to the publication of the concluding volume, which is to present the pathological aspects of the subject. In its completed form this work promises to have no equal in the English language, and it will stand as an enduring monument to the painstaking labors of its author.

A. A. H.

American Practice of Surgery. A Complete System of the Science and Art of Surgery by representative surgeons of the United States and Canada. Edited by **Joseph D. Bryant, M.D.,** and **Albert H. Buck, M.D.,** New York. Complete in eight volumes. Vol. II. Imperial octavo, pp. 778, illustrated. New York: William Wood and Company. 1906. (Price, Cloth: \$7.00).

Scarcely had subscribers and others finished reading the first volume of this great system of surgery,—certainly they had not digested it,—when the second volume appeared. This one, like its predecessor, is divided into five parts, which are numbered consecutively to those in the first book. This, therefore, begins with part six, which deals with diseases that belong in varying degrees to the domain of surgery, and which are observed in certain parts of the United States and its dependencies, and in Canada. They are leprosy, plague, glanders, anthrax, actinomycosis, mycetoma, rhinopharyngitis mutilans, and scurvy, with special reference to diagnosis and surgical treatment. The section is written by James Farquharson Leys, Surgeon U. S. Navy. It is a most interesting and instructive disquisition on these several topics, that are too little studied by most surgeons. The illustrations are rare exhibitions of typical conditions found in each disease.

The next section, or part seven, gives a general survey of tuberculosis and syphilis in their relations to surgical work. The chapter on tuberculosis is written by Virgil P. Gibney and that on syphilis by Edward L. Keyes, Jr. The fact that tuberculosis invades so many tissues of the body not pulmonary, makes it quite as much a surgical as a medical disease; indeed, at the present day surgery is even more often invoked for the cure of tuberculous lesions than medicine. Gibney sets forth these and many other points regarding the modern pathology and treatment of the surgical aspects of the disease in forceful English, and with scientific effect. While, therefore, tuberculosis often falls within the domain of the surgeon's knife, syphilis, on the other hand, is a disease that concerns the surgeon as to diagnosis more than regarding treatment. Dr. Keyes makes this appear clearly in his discussion of syphilis, as well as the further fact that in late bone syphilis, where the destruction of bone by syphilitic inflammation is great, surgical intervention is the only way.

The succeeding section, part eight, deals with surgical diseases of various widely distributed strictures of the body, and include abscess, ulcer and ulceration, gangrene and gangrenous diseases, surgery of diseases of the skin; surgical diseases of wounds of muscles, tendons, bursæ, and connective tissue; surgical diseases of wounds of nerves, and surgical diseases and wounds of lymph nodes and vessels. The authors of these several topics respectively are August F. Jonas, William McDowell Mastin, Alfred C. Wood, Douglass W. Montgomery, J. Clark Stewart, DeForest Willard, and Charles N. Dowd. Montgomery's article on surgical diseases of the skin, covering nearly a hundred pages, is one of the most complete and best illustrated

monographs on this topic that has been published in this country.

Coming now to part nine, we find dissertations on surgical diseases caused by intense heat and intense cold, and by the electric current written by Benjamin T. Tilton and Paul Monroe Pilcher respectively, both articles being concise and brief, but adequately handling these important injuries and their resultant lesions.

Finally, in part ten, simple and complicated wounds, including gunshot wounds, are presented with an exactitude as well as simplicity of detail, both charming and instructive. Captain Carl R. Darnall, Assistant Surgeon United States Army, wrote the article on wounds of soft parts by cutting and piercing instruments, and Major William C. Borden, Surgeon United States Army, wrote that upon gunshot wounds. The latter monograph is the most comprehensive disquisition upon gunshot wounds ever published in a general treatise on surgery. The volume is replete with sound instruction, a creditable production from American Surgeons, and a praiseworthy addition to surgical literature. The editors deserve especial commendation for their labors in successfully launching this great enterprise.

Progressive Medicine, Vol. IV, December, 1906. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 349 pages, with 29 engravings. Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00, carriage paid to any address. Lea Brothers & Co., Publishers, Philadelphia and New York.

This issue of the quarterly digest completes the series for 1906. It is found a fitting climax to the excellent work which preceded it. The contributors have finished their labors for the year with never failing energy and care. As a result the busy practitioner can cull in an hour what it has taken investigators and teachers the world over months, if not years, to acquire. Special stress has been laid on practical results and the best methods of treatment. J. Dutton Steele devotes one hundred and twenty pages to diseases of the digestive tract and allied organs. His presentation of the subject, his attention to the minutest details and his clear deductions must prove suggestive to every reader. His handling of the causes of lowered gastric secretion are particularly forceful. The role of radiography in the diagnosis of gastrointestinal disease is clearly defined, and the employment of the Schmidt trocar and the Schmidt method for injecting salt solutions directly into the peritoneal cavity open up great possibilities for the future.

William T. Belfield treats of genitourinary diseases from tuberculosis to the irrigation and drainage of the seminal duct and vesicle. Under the diagnosis of renal disease, Kapsammer's report of over twenty thousand autopsies in Austrian hospitals, during the last ten years, is quoted. In regard to the relation of

gonorrhea to disease of the sexual organs in women, he says: "While it is doubtless wiser for physicians to exaggerate than to minimize the remote evils of gonorrhea in both sexes, yet there can be no doubt that the current tendency is to be sensational rather than accurate in dealing with this question." His summary of the bactericidal effects of silver compounds; the various operative procedures for the relief of prostatic hypertrophy, and the cure of hydrocele, makes most interesting reading.

John Rose Bradford, in dealing with diseases of the kidneys says: "Functional albuminuria is a condition of great importance to all practitioners, both from a point of view of diagnosis and of treatment. Certainly, it would seem at the present time that many of these cases are submitted to far more rigorous treatment, especially in diet, than is necessary. Paroxysmal hemoglobinuria, the retention of chlorides in nephritis, and more particularly the treatment of nephritis are carefully considered. This section concludes with an article on renal dropsy.

Joseph C. Bloodgood devotes one hundred pages to fractures, dislocations, amputations, and the surgery of the extremities. The healing of fractures, the problems presented by fractures at the lower end of the humerus, metacarpel fractures, and sprains of the anklejoint are all thoroughly discussed. So with osteomyelitis, Paget's disease, and bone tumors. Bier's treatment with hyperemia is detailed at some length, and this section is freely illustrated. His conclusions in regard to the treatment of tuberculosis of the bones and joints are: "I believe, if these patients come to treatment in the early stage, that open air combined with Bier's hyperemia and proper orthopedic apparatus will accomplish an ultimate cure in an increasing proportion of cases, and operations will be performed, relatively, less frequently." H. R. M. Landis contributes over sixty pages to the therapeutic referendum, every page bristling with therapeutic facts of practical importance. He says: "It has now been established beyond a reasonable doubt that in tetanus antitoxin we possess a certain means of preventing tetanus, and that this serum should be used after all wounds in which there is any possibility to tetanus developing." Many useful suggestions are made in regard to drugs. Cases of poisoning by so-called "headache powders" are cited and the possibly injurious effects of adrenalin if used continuously. Alcohol, ergot, iodine, mercury, nitre, opium, the salicylates, urotropin and many other drugs, are dealt with, mushroom poisoning is handled, and many important facts are logically developed.

A Treatise on Orthopedic Surgery. By Royal Whitman, M.D., Instructor in Orthopedic Surgery in the College of Physicians and Surgeons, New York; Chief of Orthopedic Department in Vanderbilt Clinic, New York. Third edition, revised and enlarged. Octavo, 900 pages, with 554 illustrations, mostly original. Lea Brothers & Co., Philadelphia and New York, 1907. (Cloth, \$5.50 net).

The third edition of Whitman's popular work, shows careful revision and amendment to date, much new material and many

new illustrations having been added. In the discussion of Pott's disease new methods are detailed for the application of the plaster jacket in recumbency, and greater stress is laid on the prevention of deformity and the necessity for fixation and traction in paraplegia. Reference is made to Goldthwait's work on the sacro-iliac joints but the discussion is incomplete. The *x*-ray, tuberculin, Bier's treatment, and the Moseley bone plug are now included. In lateral curvature of the spine the forcible correction, as advocated by Wullstein and Lovett, is added; for the curvature due to anterior poliomyelitis Whitman now says that support must be used. Wolff's law, atrophy of bone due to disuse, and cervical ribs are enlarged upon. The chapter on arthritis deformans is rewritten and Goldthwait's classification is followed. Murphy's method of treating ankylosis is given preference; also operative repair after obstetrical injury to the brachial plexus. Whitman has largely changed the chapter on congenital hip dislocation, and has added his new treatment of fracture of the hip by fixation in abduction. His original work on the foot has enabled him to write most instructive and entertaining descriptions of the deformities of the feet. In the treatment of flat foot he is extremely clear and thorough.

In speaking of operations in general, Whitman is often indefinite and one must refer to a general surgery to find exact direction as to methods. The discussion of apparatus is scattered and a special short chapter on the general principles involved would be a welcome addition. The book, altogether, is very satisfactory and practical, and the illustrations, type, and general appearance most pleasing.

P. Le B.

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by **A. O. J. Kelly**, A.M., M.D. Volume IV, Sixteenth series. 1906. Philadelphia and London: J. B. Lippincott Co. (Cloth, \$2.00).

The contents of this volume of the clinics present a varied and interesting group of lectures and papers. They comprise, in treatment, electrotherapeutics, by John H. W. Rhein; prevention and treatment of chronic nephritis, by James M. French; etiology and treatment of chronic constipation, by J. Dutton Steele; treatment of obesity, by P. Grocco; how operative treatment of renal or urethral calculi causes colic, by Howard Lilienthal.

In the department of medicine the topics are, clinical observations on the care of tuberculous subjects by William Porter; pulmonary tuberculosis in the middle aged and the aged, by J. Edward Squire; recent additions to knowledge of the physiologic

influence of lowered barometric pressure, by Henry Sewall; obscure renal hematuria, by Arthur R. Elliott; myxedematous infantilism and incomplete myxedema, by Roger S. Morris; syphilitic aortitis, by C. Dieulafoy; recent progress in disorders of the adrenals, by Leon Bernard.

In surgery the subjects dealt with are, principles of treatment of fractures of the lower extremity, by George G. Ross; suggestions in the treatment of hip-joint disease, by Russell A. Hibbs; tuberculous hip-joint disease,—osteomyelitis and transplantation of the fibula,—and ankylosis of the jaw, by James H. Rinehart; vesical tumors, by David Wallace; treatment of hemorrhoids, by George P. Miller.

In obstetrics and gynecology we observe, first, placenta previa and its treatment, by Joseph B. De Lee; next, lacerations of the cervix of the uterus and their immediate repair, by W. A. Newman Dorland; and finally, management of chronic cystitis in the female, by Daniel H. Craig.

Laryngology is represented by the laryngological complications of pulmonary tuberculosis, by E. F. Trevelyan; and otology by the mastoid operation, by Charles W. Richardson.

The articles by De Lee and Dorland are admirably illustrated, besides being clear and strong in the text. De Lee has presented the best exposition of placenta previa we have seen and, without disparagement to the other articles, we regard it the most attractive one in the book. The volume gives more literature of value for the money than any other serial with which we are familiar.

A Textbook of Physiology. By **Robert Tigerstedt**, M.D., professor of physiology in the University of Helsingfors, Finland. Translated from the second German edition and edited by **John R. Murlin**, A.M., Ph.D., Assistant Professor of Physiology in the University and Bellevue Hospital Medical College, New York. With an introduction in English by **Professor Graham Lusk**, Ph.D., F.R.S. (Edin.). Octavo, pp. 751. New York: D. Appleton and Company. 1906. (Price, Cloth, \$4.00).

It is seldom that one picks up a scientific work which, while imparting a sense of solidity, lacks that high-browed heaviness of tone which makes its reading a duty and not a pleasure. This translation of Tigerstedt's physiology is such an one and aside from its general excellence as a textbook, which is accepted as a matter of course, in view of the author's reputation and the preeminence of its translator, there are a number of features which are so different from the usual books on physiology that they demand attention and hold interest. The author approaches his subject in a broadminded manner; not with mincing step or haughty mien. He simply and logically lays the foundation for the study in a convincing manner. To the foundation he adds the physiology of the cell, and the structure acquires strength by the addition of the story of the chemical constituents of the body. Metabolism and nutrition come then, and here is new thought a-

plenty, chief of which is that all energy transformations of the body rest on the principles of the conservation of energy. This is something novel and as yet no physiologist has suggested it. This chapter in connection with that on the circulation, being within the strict lines of the author's especial fields of investigation, is rich in new and important material.

Every portion of the work is masterly and whether considered from the standpoint of the specialist or the general practitioner is as nearly without the pale of honest criticism as a scientific work can well be. The illustrations are excellent and number over 300, sixty-three of which are in colors. It is the most completely and artistically illustrated book on physiology ever published. Furthermore, it is quite within the bounds of reason to say that it is the broadest-minded and most satisfactory physiology in English; and that is about equivalent to including all the other languages.

N. W. W.

Diet in Health and Disease. By **Julius Friedenwald**, M.D., Clinical Professor of Diseases of the Stomach in the College of Physicians and Surgeons, Baltimore; and **John Ruhrah**, M.D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, Baltimore. Second Revised Edition. Octavo of 728 pages. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$4.00 net; half morocco, \$5.00 net).

As must be the case in new editions this book has been revised and enlarged, which may mean much or little according to the way the reader views it. The section on salts has been rewritten and a feature is made of Prochownick's diet in pregnancy when complicated by contracted pelvis. Interesting are the diets in vogue at the various water cures and of particular interest is Klemperer's work on oxaluria. Yet, as with the majority of works on diet, there is too much that is confusing as well as too much that is left to the imagination of the reader, so far as the tabular work is concerned. It is not a criticism of this particular work to say that there is too much "maybe" and too little "is." That is the fault of nearly all diet books. Except in comparatively rare instances where there is no escape, no definite statement is made as to what must be avoided. There appears to be a general uneasiness and uncertainty in the maze of chemical constituents of the various foods. Merely as an illustration, if one were working out a diet list for an oxaluric individual, he would find that gooseberries were all right so far as oxalic acid was concerned, but that the calcium table would show them to be fairly rich in lime, hence not especially desirable from that viewpoint. Yet, after all is said and done, after the tables have been well digested and the diet list prepared, along comes the statement, based on experiment, that diet has little or nothing to do with the formation of calcium oxalate crystals; that they were found in fairly large quantities in the urine of a fasting dog. Aside from these criticisms, which as previously mentioned are

not confined to this book alone, but are very general, it is most complete in the research line and leaves little to be desired as a really commendable work of reference on diet.

The Ear and Its Diseases. A textbook for students and physicians. By **Seth Scott Bishop**, B.S., M.D., LL.D., Honorary President of the Faculty and Professor in the Post-Graduate School and Hospital of Chicago; Surgeon to the Post-Graduate Hospital and to the Illinois Hospital, etc. Illustrated with 27 Colored Lithographs and 200 Additional Illustrations. Royal Octavo, 440 pages. Philadelphia: F. A. Davis Company. (Price, \$4.00 net).

The author of this treatise is already widely known to the profession through his work on diseases of the nose, throat, and ear. In that book the ear was treated in too limited a manner to make it a desirable guide. Besides, diseases of the ear have assumed an importance of late, not hitherto accorded them. This is because they are becoming better understood. The anatomy of the ear is being more thoroughly studied and, as a consequence its pathology has become revealed more completely. These conditions have led to a better line of treatment in many affections not heretofore believed to be amenable to therapeutics, medical or surgical.

Bishop has presented his subject systematically, devoting five chapters to the anatomy and one to the physiology of the ear. He then takes up the examination of patients, the uses of compressed air, and next reaches the consideration of the diseases and injuries of the ear. These he discusses with great clearness, in some instances with minute detail, and always with scientific reason and research.

The previous work of Professor Bishop on "Diseases of the Nose, Throat and Ear," met with an enthusiastic reception and a large sale. The present treatise is the outgrowth of the author's experience in preparing the former book, and of his further experience in the field covered by this one; and it is fair to presume that this later effort will meet with equal approbation. It is written for the student and general physician; it is presented in a concise, plain and copiously illustrated manner; and these qualities so happily blended should insure its success.

Abdominal Operations. By **B. G. A. Moynihan**, M.S. (London), F.R.C.S., Senior Assistant Surgeon at Leeds General Infirmary, England. Second Revised Edition, greatly enlarged. Octavo of 815 pages, with 305 original illustrations. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$7.00 net; half morocco, \$8.00 net).

Mr. Moynihan is not only a hard worker as a surgeon but he is industrious as a writer, his literary productions being as clean-cut as his surgical operations and their results. Only a few months intervened between the issue of the first edition of his treatise on abdominal operations and the demand for a second, which fact has enabled him to make many additions to the text as well as to the illustrations. He makes graceful acknowledge-

ment to J. B. Murphy, W. J. Mayo and Mayo Robson for the benefit derived from their surgical work, to which he frequently alludes in the text.

In January, 1906, a notice of Moynihan's first edition appeared in these columns from which we extract the following paragraph:

The author presents his own experience in lucid fashion and quotes cases in support of his opinions, not only from his own practice but also from that of other surgeons of experience. The work is beautifully illustrated in large part from original drawings and is printed on heavy book paper, making it at once a handsome as well as a durable volume. It is a book which every abdominal surgeon will need, and its guidance will be found of value in many difficult conditions.

This statement is reaffirmed in regard to Mr. Moynihan's second edition. His earlier work is confirmed by his later experiences, all of which receives the stamp of approval at the hands of the surgeons on both sides of the Atlantic.

The American Illustrated Dictionary. All the terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry and kindred branches; with over 100 new tables. By **W. A. Newman Dorland, M.D.** Fourth Revised Edition. Octavo of 836 pages, with 293 illustrations, 119 of them in colors. Philadelphia and London: W. B. Saunders Company, 1906. (Flexible Morocco, \$4.50 net; thumb indexed, \$5.00 net).

This is the fourth edition of a dictionary which may be considered as wellnigh invaluable to the professional man who wishes to keep abreast of advances in medical literature, and it is just what its title page proclaims it to be, that is, revised and enlarged. There are new tables of the muscles, arteries, veins and nerves; of bacteria and bacilli; operations are classified as are symptoms, strains, tests and methods of treatment. The additions to the vocabulary of medical science are numerous and apparently complete, there being over 2,000 new words. The illustrations are excellent and prominent among the pictorial improvements are new plates of appendicitis, diphtheria, gallstones, Leishman-Donovan bodies, Koplik's sign in measles, and nephritis. The dictionary may be said to be a complete work; so thoroughly covering the ground that a recent expert witness in a more or less famous if odorous murder trial now occupying the public attention, would have escaped committing the distressful "Wileysisms" of which he was guilty had he only skimmed through the pages of this book. The matters on which he was so lamentably at sea, Romberg's sign and the consensual test, are properly explained. This we regard as a sufficient index of the completeness of this book.

N. W. W.

Medical Epitome Series. Edited by **Victor C. Pederson, M.D.**, Lecturer in surgery in the New York Polyclinic Medical School and Hospital. Pathology, by **John Stenhouse, M.D.**, and **John Ferguson, M.D.** 12 mo. pp. 285. Illustrated. Philadelphia and New York: Lea Bros. & Co. (Price, \$1.00).

This is the twentieth volume of the Medical Epitome Series published by Lea Brothers and Company, and it marks the near

completion of the series, which will number 23 books. The remaining three, covering gynecology, hygiene, and nose and throat, will be issued shortly. In this volume the authors have devoted the first half of the work to general pathology; the balance is given to the special pathology of the various organs and systems. The arrangement has been made to conform to the latest methods and the work is essentially what it is intended to be,—a masterpiece of epitomisation of a most important subject; so well, so carefully has the work been done that any student is otherwise deficient who cannot lay a firm foundation for further and advanced study by its conscientious use. The book is compact and complete and being intelligent needs no other comment or commendation.

N. W. W.

The Practical Medicine Series of Year Books. Ten volumes. Series of 1906. Issued under the general editorial charge of **Gustavus P. Head, M.D.**, Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. VIII. *Materia Medica and Therapeutics; Preventive Medicine; Climatology and Forensic Medicine.* Edited by **George F. Butler, Henry B. Favill, Norman Bridge, Daniel R. Brower and Harold N. Moyer.** Chicago: The Year Book Publishers. (Price, \$1.25; entire series, \$10.00).

This is one of a series of ten volumes designed to cover the entire field of medicine for a year and while the series is intended as a broad fund of general information for the general practitioner, that he may keep abreast of the progress of the world of medicine, its division into a series of separated volumes on special subjects of allied interest, makes it possible for specialists and those interested in special work to secure only those volumes which appeal to them. The eighth volume, now under consideration, deals with *materia medica* and therapeutics by **George F. Butler**, professor of medicine in the Post-Graduate medical school, Chicago; preventive medicine and climatology, by **Henry B. Favill**, professor of therapeutics and preventive medicine in Rush Medical College; forensic medicine and suggestive therapeutics, by **Harold N. Moyer**, professor of nervous and mental diseases in Rush Medical College. The book completely fills the purpose for which it is written and becomes one of a very valuable series which in their entirety comprise a resume of the entire field of medicine.

N. W. W.

A Practical Treatise on Materia Medica and Therapeutics, with especial reference to the clinical application of drugs. By **John V. Shoemaker, M.D., LL.D.**, Professor of *Materia Medica, Pharmacology, Therapeutics, and Clinical Professor of Diseases of the Skin* in the Medico-Chirurgical College of Philadelphia. Sixth edition. Octavo, 1244 pages. Philadelphia: F. A. Davis Company. (Price, Cloth, \$5.00; sheep, \$6.00, net prices).

Here is a sixth edition which carries its license for publication in the new and necessary material contained within its covers.

Always a valuable and dependable work, it has now been brought up to the very highest type of efficiency. The alterations in pharmacal nomenclature, the changes in strengths of various preparations and new titles which have been given ordinarily useful drugs, have made this revision almost a stern necessity, and the book in every respect now corresponds to the United States and British pharmacopeias. New therapeutic agents are given the fullest consideration warrantable according to their importance, among them being included the Roentgen ray, the Finsen light, serum therapy, animal extracts, vibrotherapy and hydrotherapy in all their newest phases. The book has been increased over 100 pages and is now a completed work.

N. W. W.

The Practical Medicine Series of Year Books. Ten volumes. Series of 1906. Issued under the general editorial charge of **Gustavus P. Head**, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. VII. **Pediatrics and Orthopedic Surgery**, edited by **Drs. Isaac A. Abt** and **John Ridlon**. Chicago: The Year Book Publishers. Series 1906. (Price, \$1.25; entire series, \$10.00).

Nearly or quite three-fourths of this book is devoted to the topic of pediatrics. This portion is a concise showing of the progress in this branch for the year embraced in the resume of the compilers.

If there is anything in the orthopedic line which has escaped the vigilance of the authors of this excellent number of the year book series it is not worthy of attention. The arrangement of material and its presentation are all that could be desired and it constitutes a perfect resume of the entire field without reservation or particular condemnation. There are of course some things which apparently do not meet the approval of the writers but it adds to the value of the book that these points are not unequivocally condemned.

N. W. W.

Practical Dietetics, with reference to Diet in Disease. By **Alida Frances Pattee**, Late Instructor in Dietetics, Bellevue Training School for Nurses, New York. Fourth edition, 12mo, 300 pp. New York: A. F. Pattee, Publisher, 52 West 39th Street. (Price, \$1.00 net).

Here is a little book with an enormous amount of solid, practical, everyday information within its covers; a book which is well-nigh invaluable to the nurse and one which will be of really inestimable benefit to the physician. In a word it is a most excellent guide for proper diet in sickness, covering as it does the correct preparation of food for the invalid and the convalescent. In detail it gives the methods which experience has shown to be the best for preparing and administering foods in liquid, semisolid and solid states. There are also diet lists with especial references to the things to be avoided in given cases, with instructions for the intelligent dieting of infants and children. A splendid feature is the diet list used by eminent medical men and

some of the more prominent hospitals in this country. Typical of the character of the book is its binding, the blue and white of the nurse's uniform.

N. W. W.

A Manual of Chemistry, General, Medical and Pharmaceutical, including the Chemistry of the U. S. Pharmacopeia. By **John Attfield**, F.R.S., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain, 1862-96. Edited by **Leonard Dobbin**, Ph.D., Lecturer on Chemistry in the University of Edinburgh. Nineteenth Edition. 12 mo, pp. 776. Philadelphia and New York: Lea Brothers & Co. 1906. (Price, \$2.50).

Lea Brothers & Company has issued a nineteenth edition of Attfield's Chemistry which has been thoroughly revised by Mr. Leonard Dobbin, of the University of Edinburgh, who has brought it up to the last minute in accordance with the most recent pharmacopeias of this country and Great Britain. As a manual of chemistry for medical and pharmacy students it has no equal and the very thoroughness with which the subject has been covered in this edition makes it preeminently the standard work of today in the English language. Attfield's original plan of teaching as well as the chemistry of every substance concerned in pharmacy and medicine, has been followed out carefully in this edition and its completeness is beyond criticism.

N. W. W.

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of **Gustavus P. Head**, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol VI. General Medicine. Edited by **Frank Billings**, M.D., and **J. H. Salisbury**, M.D. Chicago: The Year Book Publishers. 1906. (Price: \$1.25; entire series \$10.00).

The authors' names are sufficient guaranty that the subjects covered in this number of the year book series are presented sensibly and scientifically and that only the important points in the year's progress are offered. The volume contains articles on typhoid fever, malaria, yellow fever, relapsing fever, Malta fever, beriberi, dysentery, diseases of the mouth, stomach and intestines, pancreas and peritoneum; abdominal pain, epigastralgia, and tuberculosis of the thoracic duct. The article on syphilis of the liver is of especial interest for the reason that the known symptoms are clearly set forth, and every possible aid to diagnosis of this most baffling condition is given.

N. W. W.

Syllabus of Lectures on Human Embryology. With a Glossary of Embryological Terms. By **Walter Porter Manton**, M.D., Professor of Clinical Gynecology and Professor adjunct of Obstetrics in the Detroit College of Medicine. Third edition. Illustrated. 12mo., pp. 136. Philadelphia: F. A. Davis Co. 1906.

In addition to a thorough revision of the text for this third edition of a very helpful volume, much new material has been incorporated, and as an elementary basis for the study of the

advanced branches of the specialties of obstetrics and gynecology it has a place in medical literature which it fills with much credit to its author. Especially good are the chapters on practical work in embryology and the methods of laboratory instruction. Many new illustrations have been added and the pictorial feature is one which gives value to the work and helps to make it more understandable and instructive.

N. W. W.

Transactions of the Section of Obstetrics and Diseases of Women of the American Medical Association at the fifty-seventh annual meeting, held at Boston, June 5-8, 1906.

The transactions of this section at the Boston meeting makes an interesting volume which is presented in a readable form. The presswork is beyond mere commendation; it is exquisite in its perfection. The illustrations bring the volume close to the de luxe line. Every paper reprinted is of especial interest.

N. W. W.

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of **Gustavus P. Head**, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. IX. **Anatomy, Physiology, Pathology, Dictionary.** Edited by **W. A. Evans, Adolph Gehrman, and William Healy.** Series 1906. Chicago: The Year Book Publishers. (Price, \$1.25; entire series, \$10.00).

The new material in the departments of anatomy, physiology, pathology and bacteriology has been gathered together in compact form in this volume and in such manner as to make the presentation of the subjects absolutely complete. The dictionary section contains all the new words which have either crept or been jammed into scientific literature during the year and there has been nothing overlooked, not even the curiosities. The book is an interesting and rather strong link in the chain of year books.

N. W. W.

A Primer of Psychology and Mental Disease. For use in Training Schools for Attendants and Nurses and in Medical Classes, and as a ready reference for the practitioner. By **C. B. Burr**, M.D., Medical Director of Oak Grove Hospital (Flint, Mich.) for Mental and Nervous Diseases. Third edition. Revised, with illustrations. Pages viii-183, 12mo. Philadelphia: F. A. Davis Company, (Price, \$1.25 net).

This is a very handy and readable book and in spite of its primary size and presentation of the elements of the subject, it contains all the material necessary for a fairly solid ground work for the further study of a most fascinating subject. It is clear and comprehensive and covers the ground of elementary study completely. After a careful reading of the primer a man who could be guilty of a Wileyism would be unforgivable. In this edition the forms of disease have been rewritten to bring the book into accord with the newer classification of insanities.

N. W. W.

BOOKS RECEIVED.

A Textbook of the Practice of Medicine. For Students and Practitioners. By Hobart Amory Hare, M.D., B.Sc., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; Laureate of the Royal Academy of Medicine in Belgium and of the Medical Society of London. Author of A Text-Book of Practical Therapeutics; A Text-Book of Practical Diagnosis, etc. In one very handsome octavo volume of 1120 pages, with 131 engravings and 11 full-page plates in colors and monochrome. Second edition, revised and enlarged. Lea Brothers & Co., Philadelphia and New York. 1907. (Cloth, \$5.00; leather, \$6.00; half morocco, \$6.50, net prices).

Textbook of Psychiatry. A Psychological Study of Insanity for Practitioners and Students. By E. Mendel, M.D., A. O. Professor in the University of Berlin. Authorised translation. Edited and enlarged by William C. Krauss, M.D., Buffalo, N. Y., President Board of Managers Buffalo State Hospital for Insane; Medical Superintendent Providence Retreat for Insane; Neurologist to Buffalo General, Erie County, German, Emergency Hospitals, etc.; Member of the American Neurological Association. 311 pages. Crown Octavo. Philadelphia: F. A. Davis Company. (Price, Extra Cloth, \$2.00 net).

Medical Diagnosis. A Manual of Clinical Methods for practitioners and students. Fifth edition, greatly enlarged and revised to date, by J. J. Graham Brown, M.D., F.R.C.P.E., F.R.S.E., Assistant Physician, Royal Infirmary of Edinburgh, and W. T. Ritchie, M.D., F.R.C.P.E., F.R.S.E., Clinical Assistant Pathologist, Royal Infirmary of Edinburgh. 12 mo., pp. 524. With 200 illustrations and 8 full page plates in black and white and in color. New York: Imperial Publishing Company. 1907. (Price, \$3.00).

Progressive Medicine, Vol. I, March, 1907. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 280 pages, with illustrations. Lea Brothers & Co., Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00, carriage paid to any address).

Paraffin in Surgery. A critical and clinical study by Wm. H. Luckett, M.D., Attending Surgeon, Harlem Hospital, Surgeon to the Mt. Sinai Hospital Dispensary of New York and Frank I. Horne, M.D., Formerly Assistant Surgeon, Mt. Sinai Hospital Dispensary. 12 mo.; 38 illustrations; 118 pages. Surgery Publishing Co., 92 William Street, N. Y. City. (Cloth, \$2.00).

Medical Epitome Series. Diseases of the Nose and Throat. By J. B. Ferguson, M.D., Instructor in Diseases of the Nose and Throat in the N. Y. Post-Graduate Medical School. 12mo., 243 pages, with 114 engravings. Edited by Victor C. Pedersen, M.D., Lecturer in Surgery at the New York Polyclinic Medical School and Hospital. Philadelphia and New York: Lea Brothers & Co. (Price, \$1.00 net).

Psychology applied to Medicine. Introductory Studies by David H. Wells, M.D., Lecturer on Mental Physiology and Assistant in

Ophthalmology, Boston University Medical School. 12 mo. pp. 155. Philadelphia: F. A. Davis Co. 1907. (Price, \$1.50 net).

Students Aid Series. Aids to Dental Surgery. By Arthur S. Underwood, M.R.C.S., L.D.S., Eng. And Douglas Gabell, M.R.C.S., L.R.C.P., Lond., L.D.S., Eng. Second edition. 126 pp. New York: William Wood & Co. (Price, \$1.00).

Aids to Medical Diagnosis. By Arthur Whiting, M.D., M.R.C.P., Physician to the Tottenham Hospital; Lecturer in and Dean of the Northeast London Post-Graduate College. 152 pages. New York: William Wood & Co. (Price, \$1.00).

Principles and Application of Local Treatment in Diseases of the Skin. By L. Duncan Bulkley, A.M., M.D., Physician to the New York Skin and Cancer Hospital. Small 8vo., 142 pages. New York: Rebman Co. (Price, \$1.00).

Aids to the Diagnosis and Treatment of Diseases of Children. By John McCaw, M.D., Physician to the Belfast Hospital for Sick Children. Third edition. 383 pages. New York: William Wood & Co. (Price, \$1.25).

The Johns Hopkins Hospital Reports. Vol. XII. Studies in Urological Surgery. Vol. XIV. Studies on Hypertrophy and Cancer of the Prostate. Baltimore: The Johns Hopkins Press. 1906.

Surgery of the Genitourinary Organs. By J. W. S. Gouley, M.D., Small 8vo. pp. 531. New York: Rebman Co. (Price, \$3.00).

LITERARY NOTES.

FOLIA UROLOGICA is the title of a new international archives relating to genitourinary diseases. With Professor James Israel of Berlin as editor-in-chief, Professor A. Kollmann of Leipzig, Dr. G. Kulisch of Halle and Dr. W. Tamms of Leipzig as associate editors and the other principal urologists of Europe as collaborators, these new international archives are announced by the house of W. Klinkhardt, Leipzig. Exhaustive original articles with colored plates and illustrations will be the principal feature of *Folia Urologica*. Contributions will be published in the four languages that are officially used in Congresses and each paper will be summarized in the three other languages. The new publication will contain a department entitled "Events in Urology" in which the regular collaborators will periodically report on the advances in this specialty, after having tested them critically in their respective services and laboratories. Finally, *Folia Urologica* is to serve as a means of collecting the Annual Reports on urological work in hospitals, clinics, etc., throughout the world. With a view to publishing contributions as quickly as possible, the issues of *Folia Urologica* will appear as often as required. Contributions from North, Central and South American authors

may be sent to either of the American editorial representatives, William N. Wishard, Newton-Claypool Building, Indianapolis, Ind., or Ferd. C. Valentine, 171 West 71st Street, New York.

THE JOURNAL OF INEBRIETY, after thirty years of continuous study of the disease of inebriety and drug taking, begins its new decade by entering upon the comparatively new field of physiological and psychological therapeutics, for the treatment of these neuroses. Arrangements have been completed by which *The Archives of Physiological Therapy* has been consolidated and will hereafter be published as a part of *The Journal of Inebriety*. This very able monthly has been developing parallel lines of study with *The Journal of Inebriety*. In the opinion of its managers its scientific value would be greatly enlarged by concentrating its work along some special lines. The disease of inebriety and its allied neuroses is a field of most practical interest, hence *The Journal of Inebriety* is selected as a medium for continuing the work of *The Archives of Physiological Therapy*.

Henceforth, in addition to the various phases of this subject which *The Journal* has presented, the therapeutic effects of hot air, radiant light baths, electricity, massage, psycho-therapeutic measures and other physiological means will occupy a prominent space. This effort to clear away the confusion and broaden the studies of therapeutic means for cure, will make *The Journal of Inebriety* one of the most practical and valuable visitors to every hospital and institution, as well as to all specialists who treat brain and nerve neurotics. We shall aim to present and formulate the latest studies and facts along these frontier lines, and in this way lift the whole field of therapeutics out of its present empiric stage into one of rational therapeutics.

ITEMS.

MESSRS. KRESS & OWEN COMPANY, Manufacturing Chemists, 210 Fulton Street, New York, were visited by fire, on the morning of March 4, 1907, which practically destroyed the manufacturing part of their business. They had, however, a duplicate plant in storage and after four days and nights of continuous work were again turning out *Glyco-Thymoline*. This remarkable display of business enterprise is worthy of record.

MESSRS. BATTLE & CO., Saint Louis, have issued recently No. 12 of the series of twelve illustration of intestinal parasites, which they will be pleased to send on application.

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

MAY, 1907.

No. 10

ORIGINAL COMMUNICATIONS.

The Relation of Tuberculosis to Municipal and Industrial Life.¹

By CHARLES STOVER, M. D., Amsterdam, N. Y.

WHEN it is remembered that there are annually 150,000 deaths from tuberculosis in the United States, that there are in the state of New York at this moment not less than 35,000 living victims of this disease, some consideration, first of the appalling waste of human life, and second of the means for its prevention, cannot fail to interest us.

Ten per cent. of the deaths in the United States from all causes are from tuberculosis. The decade from 1896 to 1907, out of an annual average of 126,667 deaths in New York state, 13,365 were from this disease about 10½ per cent. In the city of Amsterdam for the same period there was an average of 392.1 deaths, of which 31.3 were tubercular—about 10 per cent. For the same period in Montgomery county as a whole, there were on the average 50.9 deaths annually, which indicates that about three-fifths of all the cases occur in the city of Amsterdam, although the population is but one-half or less than that of the county. The loss to the state is the greater because these lives are given up, not at the end, but rather at the beginning, or in the midst of their active careers. Thus Osler states that the ancient opinion of Hippocrates is correct—namely, that the greatest number of cases occur between the ages of 18 to 35 years, although no age is exempt, from the suckling to the octogenarian.

GOVERNMENT ISOLATION HOSPITALS.

Recognising the communicability of this disease, state and national governments have undertaken the cure of tuberculosis in isolated hospitals. New York state has Raybrook, in the Adirondacks, with accommodations at present for about one

1. Read at the annual session of the Board of Trade, Amsterdam, N. Y., Monday evening, January 14, 1907.

hundred and fifty cases. The policy of the state is to provide only for incipient consumption, or to put it in another way, for those most easily curable, so that the greatest number possible at the least expense, may be returned to continue their vocations. It is to relieve the state of pensioners, not to provide an asylum for the incurable. Unfortunately very many cases cannot avail themselves of a change of climate or a health resort or a sanitarium or tent colony life. It is stated as a fact that 25 per cent. of the families in the United States are living on \$400 a year or less. Now, from out of these homes and among these families quite a large percentage of tubercular patients come, hence they must remain under the care and observation of their family physician until relieved by art or released by death. States should take cognisance of this fact, for a nation's humanity and wisdom is nowhere better shown than in the care and safety it gives its helpless and dependent people. While the state is thus doing something in the care of victims of tuberculosis, can it be said that municipalities and corporations are doing all that can be done in this direction? In order to answer this inquiry we will later refer to some of the causes that are recognised as contributing to the production of tuberculosis.

PURE AIR OF GREATEST IMPORTANCE.

It is unfortunate that a popular belief in the incurability of tuberculosis so widely exists. There has been an unmistakable decrease in the disease during the past decade. The records of New York city indicate this. Massachusetts, that was a hotbed of tuberculosis for so many years, has reduced the death rate very considerably in this particular. Glasgow, that keeps very careful statistics, has shown a very extraordinary fall in the death rate from tuberculosis. There are scores of people among us who have recovered by change of climate, change of occupation, or change of environment. There are scores of people among us who are destined to die of tuberculosis if changes in these respects are not made for them. If the city cannot go to the country, cannot something of the country be brought to the city to help these unfortunates? Pure air is a vital necessity, but of all needs, most sacrificed in the evolution of our civilization. Everybody knows that in badly ventilated rooms the air acquires a bad odor, especially noticeable on entering, and that persons upon remaining, sooner or later suffer.

According to Professor James, of Columbia university, New York, the principal symptoms are a feeling of heaviness and oppression, headache, drowsiness, malaise, vertigo, tinnitus aurium (ringing in the ears), nausea and faintness. If the conditions are maintained for a longer time, there is a loss of appetite.

coated tongue, indigestion, nausea, constipation, and nervousness, and subsequently, if the evil be persisted in, the general health may be seriously impaired, secondary anemia and malnutrition being pronounced features, together with a general increased susceptibility to the infectious diseases. Consider for a moment that an individual breathes from 14 to 20 times per minute, that is, he gets about 1,000 feeds of air in an hour. The primary object is to get oxygen to vitalise the system. Reflect that in rooms not equipped with proper ventilation, the occupants breathe the expired air over and over, not of their own bodies alone, but that of others. To this foul air add the impurities, the gases, the dust and dirt of industrial life, and is it any wonder that pulmonary disease is frequent? But the evil does not end there: the lowered vitality from imperfect oxygenation of the blood leads to many other ills in other tissues and other organs. The public school presents the same conditions operating upon very susceptible subjects.

SCHOOL VENTILATION MUST BE ABSOLUTE.

Some English doctor shows that where mechanical ventilation was applied to school rooms, the carbonic gas was three-fifths, the organic matter was one-seventh, and the micro-organisms less than one-ninth of what was found in schools ventilated by the usual methods. It may be asked what is considered good ventilation in a school room. Dr. D. F. Lincoln, a recognised authority on this subject, says the air should be furnished in a fresh volume of from 40 to 100 cubic meters hourly to each scholar, that is, 1,400 to 3,500 cubic feet. Professor Howell of Johns Hopkins, also places the necessary amount per hour at 100 cubic meters. That is to say, if an individual occupied a room 20x15 and 10 feet high, there would be in it sufficient air for one hour, if it were possible to utilise it all.

If the room is spacious so that each pupil has 300 cubic feet of space the whole air-contents of the room might be evacuated from five to twelve times an hour. If the room, however, is small, say 200 cubic feet per head, the change must go on faster—the entire contents must be changed every $3\frac{1}{2}$ minutes. Now this is done without causing a draught. But when the room is crowded, in order to keep up the standard, suppose the air is changed once in four minutes, there will then be a very great draught. Therefore, a closely packed room cannot be well ventilated because the inmates cannot stand the draught. The conclusion then is that each pupil should have about fifteen square feet of floor space, or better still, twenty.

One of this committee had his attention drawn to the fact that many children in the East Main street school, of this city, had

sore throats, due to exposure in the winter time by open windows raised for ventilation. Investigation showed that the janitor had been instructed by a member of the board of education to close the ventilators because too much coal was consumed.

There is occasion for a better system for cleaning the floors of the public school buildings. One of the janitors says that the occupation of the room limits opportunity during the daytime, while the absence of illumination makes it impossible at night. Moreover the dry sweeping fails to remove the dirt satisfactorily. Moist sawdust might present some advantages. Father Browne, with his accustomed enterprise, has had installed at St. Mary's church and institute, a dustless pneumatic apparatus similar to that frequently seen in the large New York hotels.

CROWDED TENEMENTS A GREAT EVIL.

The pinching poverty that obliges so many thousands to live in crowded tenements is the cause of deprivation of air. Thus, in Glasgow it was shown that in acute diseases of the lungs the death rate was as high as 9.85 in the smallest tenements, and as low as 3.28 in the largest. The rate is 3 to 1. In the British army in a period of 1830-1846, the mortality from tuberculosis was 7.86 per 1,000; in 1859-1866, when an increased cubic space per head was made, it fell from 7.86 to 3.1 per thousand.

Dr. T. Mitchell Prudden, New York, says infectious diseases of the respiratory organs are steadily increasing; as people are more and more huddled together in offices, dwellings, conveyances, and places of public assemblage, a large part of these diseases are directly traceable to infectious cast-off material in the air.

In some of the broom factories in this city the moistening of the dusty broom corn lessened the baneful effect of dust upon the respiratory tract. Likewise the substitution of wet for dry grinding was of great benefit to the grinders employed in the spring shops of the city. Two years ago in one of the industries of our city there occurred an unusual number of pulmonary hemorrhages. It was thought that a very dry dust resulting from the manufacturing process carried on, was the cause of the trouble. The proprietors gave one of our physicians a free hand to suggest and apply a remedy. Unfortunately there was no precedent to be precisely applied, but by experience and liberal expenditure of money, the introduction of suction and blowing apparatus has steadily improved the sanitary conditions, and pulmonary hemorrhages are no longer conspicuous. There can be no doubt about the life saving effects of these industrial changes.

It is summed up this way: the greater number of our people must live indoors and be more or less crowded together; conditions of health demand pure, fresh, unbreathed air; the air of assembly rooms is insufficient, more should be introduced, while foul air is removed.

COMMERCE AND INDUSTRIES NEED REGULATING

Right here we are confronted by another difficulty—namely, the contamination of the air by commerce and municipal enterprise, another penalty paid for being civilised. Every municipality should be encouraged in an honest effort to maintain clean streets. Dry sweeping, as has been recommended for asphalt pavements, probably does prolong the life of the pavement, but it only displaces the dust and creates a nuisance to annoy pedestrians and adjacent house dwellers. Watering, of course, effectually settles the dust, but on stone surfaced roads it must be regularly repeated and this results in a muddy street, which is another nuisance. Moreover, it involves a considerable expense that few municipalities will be willing to incur, for it is assumed that individual effort cannot be relied upon. One man sprinkles his street front, but suffers from the dust of his less energetic neighbor.

Some authorities advocate the use of crude petroleum, or thin tar applied on the surface or incorporated in the upper layers of the macadam road. Some of you have seen this in your auto trips about Saratoga and Albany. In California, where petroleum is cheap, it is said to be very satisfactory. In respect to sprinkling the brick pavement, that seems to be so generally popular, there is a conspicuous advantage. It can be sprinkled and even kept continuously moist without that disintegration of substance that marks asphalt when watered. It is submitted that no pavement can be freed from its dust by dry cleaning alone; sprinkling must be supplemental.

THE ROLE OF BACTERIA AND DUST.

Professor Tyndall, and Monsieur Jean Binot, both carried on experiments to determine the bacterial limit in the air, ascending Mt. Blanc for the purpose of observation. Near the mountain top it was found that no or few bacteria were found. The air of the country has fewer than that of cities; the open parks in cities are better than the slums near by. The ordinary streets are much like the slums; some of us can shun the latter, but we cannot shun the street. On a blistering summer day or in blustery March, a thimbleful of the pavement dust may contain from 900 to 160 millions of bacteria. This enumeration fails to indicate the significance of this statement, it marks the quantity but

not the quality. Some of these bacteria are very potent for mischief. Think for a moment how many consumptives expectorate in the streets! The bacillus of tuberculosis has been found alive in sputa when kept dry for ten months. A rigid enforcement of the law against spitting in public places ought to be applied.

The whirlwinds of dust, formerly occasional, now made perpetual by the modern automobile and trolley car, permeate the dwellings so that few houses are freed from constant ravages by dust. It has been observed that the upper stories of houses and public buildings are the freest from this nuisance, a sanitary argument for the skyscraper.

When Morrell Mackenzie toured the United States he came to the conclusion that the dust of the cities, due to imperfectly cleaned streets, was the chief cause of the widely prevalent catarrhs that marked a national disease.

As another means of lessening tuberculosis the close inspection of the milk supply by our sanitary officials is to be encouraged. The relations of human and bovine tuberculosis cannot be ignored. There has been some question as to the communicability of the one by the other, the balance of authority being in the affirmative. But apart from this, inasmuch as pure milk is essential to infant feeding, it is necessary that thousands of infants having a predisposition to tuberculosis, shall be safeguarded by good nourishment during the early years of life, for be it remembered that something besides the germ of the disease is essential to develop tuberculosis, that is, a proper soil. Dr. Austin Flint likened it to a pair of scissors, one blade representing the bacterium, the other blade representing the soil. They must be united to be efficient. Herein lies the whole scheme for the prevention of tuberculosis or any infectious disease. On the one hand, the problem is to exterminate the bacteria, and on the other to raise the vital resistance of the individual by every means that contributes to better health, by pure food, pure air, pure water, pure soil.

MILK MUST BE PURE.

A Massachusetts agricultural society reported a case where 33 per cent. of the calves fed from the milk of tuberculosis cows succumbed to the same disease. Frequently milk and cheese made from such cows have been shown to be infected with tubercular bacilla. Physicians have traced epidemics of typhoid and scarlet fevers to infected milk. As experience increases, more and more the means of conveying the various infectious diseases are found to be identical, varying only in degree.

Health boards have undertaken to standardise public milk, gauging it by the number of bacteria found in a cubic centimeter.

It should be remembered that some bacteria are always to be found in water and milk, and that not all are harmful. As was said heretofore, the quality of the infection is to be considered. If a standard of 50,000 to the cc. is established no city of the first class would have its supply.

It is too bad to have to state it, but milk with 100,000 per cc. must be allowed to meet the demand. Some milk shows one or two millions to the cc. There is a certified milk (one with an official seal on the container) produced near Canajoharie, marketed in Schenectady and Albany, that in mid-summer showed a test of only 600 to the cc. Now what makes the difference? In a word, cleanliness. It comes from a model dairy, large and airy in construction, with asphalted floors, graded drains, water supply for flushing, groomed cattle washed down on flanks and udders, and tails tied up before milking, attendants' hands washed, white uniforms donned, all containers sterilised by steam, milk put by the milker in strainer in upper floor of milk house (a separate building) and delivered to bottler on lower floor in an aseptic room, where it is sealed and then kept at even temperature.

An epidemic of bowel trouble occurred in a child's hospital in a neighboring city, using certified milk, and the milk was found to have suddenly gone wrong. Investigation showed that while dry hay was being put in the loft of the cow stable, the dust of the hay had caused the outbreak.

"THE AIR WE BREATHE"

Another source of contamination in the air is found in the burning of soft coal. We get in some measure accustomed to this while in the city, but observe it more particularly when approaching the city from the country, or when the laundry is hung on the line outdoors to dry. If we are enveloped by it for a brief moment by a passing locomotive, or some neighboring smokestacks, we protest, but must perforce continue to breathe it. What is it that we breathe? According to Dr. DeWitt C. Greene, whose interesting paper on this subject in the *Buffalo Medical Journal*, January, 1907, is liberally drawn upon, the gases that are included in the soot are carbonic oxide, carbonated hydrogen and sulphurated hydrogen. One ton of coal contains about sixteen pounds of sulphur which escapes into the air as sulphurous acid; a portion of this combines with the oxygen of the air to form sulphuric acid.

This is destructive to vegetable and animal tissue, and therefore detrimental to the pulmonary tract of individuals, to the foliage in the landscape, and exceedingly ugly in its effect upon the monuments and buildings of a city. This smoke problem is

by no means a new one. "About six hundred years ago when London had a population of only 50,000 the citizens petitioned King Edward I to prohibit the use of soft coal, which is the kind that today makes the smoke for our city, and he responded by making the use of soft coal an offense punishable by death."

At the present time in England, firemen and engineers are liable to a fine if their engines smoke unnecessarily. In Boston there is a law that no boiler will be allowed unless the owner agrees to use hard coal, or a smoke preventer. In Cleveland where so much trouble occurred from smoke of railway locomotives, a record was kept of five different roads running into the city. A chart was used ranging from 0, no smoke, to 100, very dense smoke, and giving the length of time of observation. By judicious firing the amount was reduced from 20 per cent. to 11 per cent. It goes to show what care in stoking will do. New York city has obliged the New York Central & Hudson River Railroad to use anthracite, and very little soft coal was used there before the great coal strike.

Buffalo has an ordinance against smoke from engines but it is not enforced. In England a member of Parliament has proposed to electrify London by producing the current in the midland coal fields and transmitting it to the city. It is estimated that the annual damage by the smoke nuisance in London is \$10,000,000. This plan Mr. Lupton thinks would do away with the furnaces and smoke producers and make London the sunniest and most beautiful city in the world. Dr. Greene states that in his neighborhood there is a manufacturing plant which has been in existence for years, during which time no annoyance was experienced by the neighbors on account of smoke. The plant changed hands May 1, 1906, the new firm continuing to use the same bituminous coal, boiler and engine. Soon the amount of smoke emitted became so great at times that the neighbors were compelled to close their windows and send out their laundry. This condition was relieved only by applying to the authorities. It is related by a carpenter who some time ago was employed in Pittsburg in the construction of a hotel, that it was so smoky that each carpenter was given six candles a day that he might be provided with sufficient light.

Anthracite coal, since it is found only in a limited area, principally in Pennsylvania, will always be dearer than bituminous which is scattered throughout many states. It, therefore, is destined to be used. But is it therefore necessary to create a nuisance? Is there necessarily an antagonism here between commerce and sanitation? Munich has the reputation of being the most free from smoke of any manufacturing city in the world. Smoke consumers are used to take up the smoke. In this city

are large foundries for making bells, bronzes, iron, machinery, steel wares, and fifty breweries, all using coal. In 1905 Munich had a population of 500,000. It may be that "smoke means industry," but cannot we have industry without smoke?

CONCLUSIONS

Finally, we may recognise the following as our chief weapons in fighting this disease: first, education of the public, particularly of the poorer classes who do not fully appreciate the chief danger of the disease. Second, the compulsory notification and registration of all cases of tuberculosis. The importance of this relates chiefly to the poor and improvident, from whom after all comes the greater danger, and who should be under constant surveillance in order that these dangers may be reduced to a minimum. Third, the foundation in suitable localities by the city and the state, of sanatoria for the treatment of early cases of the disease. Fourth, provision for the chronic, incurable cases in special hospitals. (Osler). These in the main, relate to public hygiene, to official administration. What we have discussed tonight, however, belongs to a higher plane of action—namely, the prevention of disease. In the majority of all cases of tuberculosis the infection is by what is breathed with the air. Can we do anything to make the air better for ourselves and those more or less dependent upon us?

31 Division Street.

Further Observations on Epiphyseal Separation of the Ends of the Humerus.^{1 2}

By M. M. LUCID, M. D., Cortland, N. Y.
Surgeon to Cortland Hospital,

THE subject which by your courtesy I am at liberty to introduce for discussion today is one which is full of interest, and considered important alike to physician and surgeon. It has been selected by me not alone because of the paucity of research upon the conditions of which I desire to make mention, but because my attention has been attracted recently by some very unique and interesting cases and, too, because the scope of usefulness of surgical methods and appliances is continually changing and occupies the foremost place in the work, the thoughts, and the discussions of practical surgeons.

ANATOMICAL PHASES.

I shall discuss only the practical anatomical phases, the etiology, diagnosis, and treatment equitably, for the purpose of

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York at Syracuse, October 15, 1906.

2. This communication is to supplement a paper presented by me to the Oswego County Medical Society at Pulaski, N. Y., May 9, 1899, and printed in the New York Medical Journal for September 16, 1899.

reviewing such conclusions as have seemed justifiable, with the hope that I may be able to present an outline of this subject which will prove of interest, and invite your criticism.

It is, indeed, strange that so little has been written upon the subject of epiphyseal separation of the ends of the humerus, either by remote or modern surgeons; but the epiphyseal structures are small, and we are ever conscious of the fact that nowadays most surgeons are looking for larger game. The subject of epiphyseal separations is still in need of further study, and the knowledge necessary to insure positive results can only be gained by the careful study of many cases. Nothing systematic, save the brief references extended by Hamilton, Smith, and Moore, and recently by Poland, has, to the writer's knowledge, been published regarding epiphyseal separation of the ends of the humerus.

When we appreciate the positive fact that no physician or surgeon has, after improper reduction and faulty fixation of the injury referred to, had perfect movement, we have sufficient data to justify us in concluding that in no field of bone surgery is harmonious action of the physician and surgeon more necessary for the results demanded and justly due the suffering patient.

Many are the problems that present themselves for solution in the management of cases of epiphyseal separation of the ends of the humerus, for the proper determination of which all of the surgeons resources are requisite. Few cases in bone surgery make greater demands upon his tact, knowledge, experience, and judgment: or in which the necessity for intelligent and effective treatment is more urgent.

While it is not the purpose of this paper to give a detailed report of my series of cases, six of the upper and nine of the lower, in all fifteen, still I find upon consulting the literature of the subject that it is sufficiently rare to demand your attention, and from such references I feel that we can draw valuable deductions when associated with similar experiences which, no doubt, many of you have had.

A brief description of the plan of development of the humerus will enable us better to understand the separation of the epiphyses, both at the upper and lower ends of the bone. The humerus is developed or originally formed from seven cartilaginous centers—namely, one for the shaft, one for the head, one for the tuberosity, one for each epicondyle and two for the lower articulating ends of the bone. The shaft is ossified in nearly its whole length at the time of birth. Ossification begins in the centers for the upper end of the bone between the first and fourth years, and they coalesce by the end of the fifth year so as to form

a single epiphysis, which finally unites with the shaft about the twentieth year of life.

At the lower end of the bone, ossification begins in the radial portion of the articular surface at the end of the second year, and the trochlear portion at the twelfth year; in the internal epicondyle at the fifth year, and in the external epicondyle at the fourteenth year. At the sixteenth or seventeenth year of life all the centers are joined to each other and to the shaft, except the inner epicondyle, which does not unite by bone with the shaft till the eighteenth year. It will be observed, therefore, that although the ossification begins in the upper epiphysis first, it is the last to form bony union with the shaft, which process is completed about the twenty-first year of life. It is hence apparent that the superior epiphysis of the humerus comprises not only the head of the bone, but likewise both tuberosities, with that portion of the bicipital groove which is not situated between the processes. Internally, it corresponds exactly to the cartilaginous surfaces of the head of the humerus, but in front, externally, and behind its line of junction with the shaft passes below the tuberosities. The supraspinatus and infraspinatus muscles are not, therefore, attached to the lower fragment, nor is there any difficulty in comprehending osseous union, for the head of the bone forms one body with the tuberosities, and is richly supplied with blood.

ETIOLOGY

Epiphyseal separation of the ends of the humerus belongs almost exclusively to the periods of youth and childhood, and is occasioned either by a direct blow or fall upon the shoulder, or by a violent wrenching of the arm, as during delivery, causing separation of the superior epiphysis; while separation of the lower epiphysis is usually the result of a fall upon the elbow, excessive adduction or abduction of the forearm with superextension, or a sudden or unexpected push of the arm which it is unprepared to resist.

PATHOLOGY

Upon dissection in these cases in the young, the head of the humerus is found broken off at the tubercles, but it remains in the glenoid cavity and does not move with the shaft. The upper end of the lower fragment projects in front, when displacement exists, and is less sharp and angular than in cases of a broken bone. Taking the head of the humerus of a subject ten years of age, parted by maceration we find the angle made by the junction of the plane projected through the anatomical neck which makes about two-fifths of the whole surface, with the plane passing below the tuberosities measures about one hundred degrees.

Separation of the upper epiphysis of the humerus will not necessarily open the shoulder joint, unless in cases of very great violence, as the capsule is firmly attached to the diaphysis. In the adult the epiphyseal line marks the upper limit of the surgical neck.

The muscles are apt to acquire their greatest tension at the moment of separation, and those whose actions are in direction with the shaft press upward, the head being set upon the shaft at an angle, and were it not for the muscles attached to the tuberosities, those which act in the direction of the shaft would have a tendency to roll the now movable head upon the glenoid surface; but, instead, the muscles attached to the tubercles contract and roll the head in the socket and produce dislocation backward of the facets, which position throws now the superior edge of the diaphysis forward and retains it there. When extension is made, the head works on the projecting angle of the diaphysis, and the tense deltoid muscle, pressing the shaft backward, will restore the rotundity of the shoulder; but the cessation of the extension finds the capsular muscles ready to roll the head out and project the diaphysis forward, and the symptoms return as soon as the extension ceases.

Of the lower epiphysis very little has yet been written concerning the pathology. The synovial membrane forms at about the fifteenth year and afterward, when it overlaps the epiphyseal line. The epiphyseal line is a little higher on the outer than on the inner side. It inclines obliquely downward and inward. The epiphysis is thinner internally than externally. The humerus is separated from its cartilaginous expansion at the condyles near the elbow joint, in which case the lower fragment would comprise the entire epiphysis, which is composed of four distinct pieces, but either or both epicondyles may remain attached to the fragment.

DIAGNOSIS

Notwithstanding the very positive statements with reference to the diagnosis of epiphyseal separation of the ends of the humerus by Sir Astley Cooper, Professor R. W. Smith, and Professor Frank H. Hamilton, one would scarcely suppose that great confusion had existed, and still exists, as regards the exact nature of fracture of the humerus at the point under discussion: but error of diagnosis does occur, and that constantly, as pointed out by Poland in his work upon "Separation of the Epiphyses." In my opinion this results from the fact that a clear conception of the change of position has not been put forth, and more than this, no method that secures reduction, save that of Moore's which is a most effectual one, has thus far been proposed. The constancy

of the symptoms make this condition differ from most that occur in adjoining structures.

The chief diagnostic signs of separation of the upper epiphysis from the humerus are: first, an abrupt projection can be seen and felt on the front of the shoulder about one inch beneath the coracoid process, caused by the upper end of the lower fragment. Second, crepitus, when felt, is of a softer character than in fracture. Third, the end of the shaft is rounded and smooth, not sharp as in fracture, and has the form of a low cone. Fourth, the immediate recurrence of the deformity when the means employed for its reduction cease to be in operation. The most important practical point with reference to the diagnosis is that the accident is apt to be followed by arrest of development if not properly reduced. These diagnostic and unfailing manifestations deserve to be memorised, because they exemplify the great difficulty often experienced in diagnosing exactly the true seat of the solution of continuity, as well as the necessity that these signs should be correctly interpreted. The *x*-ray affords, perhaps, the most positive means for diagnosis. The simple anatomical fact which affords valuable information with reference to the diagnosis of separation of the upper epiphysis is that the tuberosities of the humerus form a part of the upper fragment.

TREATMENT

In view of such a displacement at the upper end of the humerus, the natural mode of reduction would seem to be one that would carry the shaft backward and thus restore the corresponding facets to their normal positions. The great error that is constantly made is the severe and protracted extension made to reduce the relaxation, which traction may, in a measure, cause the disappearance of the deformity; but the moment the parts are abandoned to the uncontrollable action of the muscles the deformity recurs.

The most effectual mode of reduction is by carrying, with moderate extension, the humerus forward and upward. The head will roll upon the glenoid surface in any motion of the arm until restrained by its capsule. Now then, while the humerus is still back of the central line of the body, the head is rolled upward, and long before the humerus is brought up perpendicularly, the capsule at the lower border of the head has become tense, thus holding it firm; while the humerus, being thrown up and restrained by its muscles, slides the diaphysis backward, producing a coaptation of the corresponding facets. In other words, the reduction is effected by carrying the arm forward and upward, using moderate extension to the perpendicular line with the body.

The retention is effected by moderate extension while bringing the arm down to the side, and maintaining this slight extension until dressings for the purpose of continuing it are applied. Moore's method, which consists of a Swinburn splint fastened to the outer side of the arm, resting its lower end in a strip of adhesive plaster, while the upper end projects two inches above the shoulder, with a notch through which a bandage is passed under the axilla for extension, fulfills easily and promptly the indications.

With reference to the diagnosis of separation of the epiphysis at the lower end of the humerus, it is easy,—on paper. But when the surgeon is called, enough time has usually elapsed to permit of swelling, and with an elbow-joint often as big as the calf of the leg, or bigger, and the bony landmarks covered deeply by congested and edematous flesh, I know of nothing more difficult, in reality, than to determine just the nature of the injury. The *x*-ray affords at this juncture valuable assistance.

There may be fracture alone of the humerus, ulna, or radius, or any two of these bones, or each may have therewith associated a dislocation, or a dislocation alone may be present. The dislocation is easiest of diagnosis because of abnormal rigidity, but fractures, either singly or with a dislocation, are less easily determined with exactitude. If the beginner in surgery will wrap the elbow of a skeleton in a pillow and try and examine the joint through its depths, he will approximate the difficulty of the case. Could we be sure of dislocation only, our duty is plain—namely, simply to reduce it at once, for any delay increases the difficulty and also invites a stiff joint. Again, if we felt certain of fracture alone, we should feel mentally at ease, for there need be no haste in setting a fracture if the fragments are not badly displaced, because no callus is formed for nearly a week, which time would be sufficient to allow swelling to subside, and reduction could then be exactly performed.

Unfortunately, however, the surgeon must often be in doubt, because of great swelling, as to the exact diagnosis, and a positive diagnosis obtained at the earliest possible moment has everything to do with good surgery. In this condition also the *x*-ray affords valuable and most reliable aid in early diagnosis. Under such circumstances, the practical point I am about to mention becomes of the utmost value. Put your patient under anesthesia, this being the proper procedure in all cases of fracture, unless there is some organic lesion. Now, apply an Esmarch bandage, starting at the hand and going very slowly but firmly up the forearm, over the swollen elbow joint, and continue until the armpit is reached. I leave the bandage on say for ten or twelve minutes. At the end of that time, remove it, beginning at the

hand, but leaving the final few turns upon the upper end still tightly in situ. The elbow thus exposed will be pale, bloodless, and no longer swollen. All the congestion and edema are, for the time being, caused to vanish.

The diagnosis can now be made with positive ease upon the following points: the lower end of the upper fragment will be tilted forward, will be prominent, and the elbow joint pushed seemingly backward with limited flexion, but not extension of the forearm. The lower end of the upper fragment has greater width than any fracture at the base of the condyle and the line of separation is nearer the end of the bone. There is no change in the relation of the three bony points. The existence of abnormal mobility at a very low level on the humeral shaft, muffled crepitus, is very suggestive.

REDUCTION

An easy mode of reduction is to grasp the forearm and make extension with the knee in the bend of the elbow, adjusting the fragments with the free hand. Now the remaining turns of the Esmarch bandage are removed, and, of course, the swelling promptly returns; but the surgeon has accomplished his purpose. He knows the real diagnosis, applies both an anterior and posterior angular splint, with pressure anteriorly over the seat of separation, is ready to protect his own reputation, and can forecast the outcome with some degree of accuracy.

We all know that it is early errors in exact diagnosis, with resulting unfortunate lines of treatment, which most often subject the practitioner to unfavorable results. The question of passive motion in this separation is absolutely essential to get perfect extension and flexion. This should be resorted to by the surgeon,—no one else,—about the seventh or eighth day; then about the twelfth day, and after that every other day until the twentieth day. The fragments should be held in apposition and motion given very cautiously, thus permitting a thorough understanding as to what is taking place at the seat of the separation. If after the twenty-second day complete flexion and extension cannot be produced, an anesthetic should be given and the adhesions broken up so as to allow both flexion and extension. Many times it is advisable, after provisional callus formation when the fragments are in apposition, to bandage the arm one day extended and the next day flexed. In this manner brilliant and satisfactory results may be obtained when other methods might result in ankylosis.

I am very glad to have had the opportunity to present this subject. There is no branch of surgery that is more interesting,

and I know of none in the practice of which ingenuity, conservatism, and good judgment are more essential to the securing of good results.

41 MAIN STREET.

Diseases of the Nasopharynx in Infancy.¹

By JOHN LOVETT MORSE, A. M., M. D.

Assistant Professor of Pediatrics, Harvard Medical School; Assistant Physician at the Children's Hospital and at the Infants' Hospital, Boston.

MY experience leads me to believe that the importance of the diseases of the nasopharynx in infancy and the frequency of their occurrence are not appreciated by the general practitioner, and that they are often either entirely overlooked or insufficiently and improperly treated. It would be impossible for me, even if I desired to do so, to take up all of these diseases, even cursorily, in the time at my disposal; consequently I shall speak only of those with which I am most familiar and which seem to me to be the most important. I shall consider them, moreover, entirely from the point of view of the pediatrician and general practitioner, which is the only way in which I am competent to consider them, and not from that of the nose, throat, and ear specialist. Before speaking of the diseases of the nasopharynx in infancy, it will be well to run over the anatomy of this region at this age.

NOSE.

The nose is relatively small, the respiratory portion being very small. The height of the posterior nares at birth is from 6 to 7 mm. and the breadth between the pterygoid processes at the hard palate 9 mm. The nasal cavity consists of an upper olfactory region occupying the ethmoidal portion of the cavity, and a lower respiratory region occupying the maxillary part. The nasal cavity at birth is relatively long and shallow, the respiratory portion being very narrow. The whole opening of the posterior nares on either side is just large enough to admit the end of a medium-sized male catheter. The nasal cavity begins to increase in height directly after birth, increasing pretty rapidly during the first six months but very slowly during the remainder of infancy. The size of the posterior opening doubles in six months, after which it remains stationary until the end of the second year. At the end of the seventh month the nasal cavity begins to approach the adult shape though it is still relatively broad.

VOMER.

The posterior edge of the vomer is nearly horizontal at birth and remains very oblique throughout infancy.

¹ Read before the Buffalo Academy of Medicine, February 12, 1907.

NASOPHARYNX.

The nasopharynx is very low at birth but is relatively long from before backward, the distance from the hard palate to the soft parts of the back of the pharynx being nearly as great at birth as in the adult. The nasopharynx at birth is, therefore, merely a narrow passage running obliquely backward and downward from the constricted opening of the posterior nares. The soft palate is placed more horizontally than in the adult. The height of the nasopharynx increases in the same way as that of the posterior nares.

EUSTACHIAN TUBES.

The Eustachian tube is nearly horizontal at birth but slants a little during the latter part of infancy. The opening at birth is at the level of the hard palate. It remains at this level for nine months, but later becomes distinctly higher. The tube is not only relatively but absolutely wider at its narrowest point at birth and during infancy than in the adult. This may explain the ease with which catarrhal processes travel to the middle ear in infancy. The prominence at the back of the pharyngeal opening of the tube is but slightly developed in infancy and the fossa of Rosenmuller is therefore almost imperceptible. Catheterization of the tube at this age is, therefore, practically impossible.

EARS.

At birth and during infancy the external auditory canal runs inward and downward and the membrana tympani is almost horizontal. In introducing the aural speculum, therefore, the ear must be drawn forward and downward instead of upward and backward or the canal will be bent on itself. The petrosquamosal suture is open at birth allowing, therefore, a close connection between the blood vessels of the brain and those of the middle ear. It is said to close at one year, although this is somewhat doubtful. The mastoid antrum is present at birth but the mastoid cells very seldom develop during infancy. The maxillary sinus is well developed at birth. The frontal sinuses are not developed either at birth or during infancy.

PHARYNX.

The connective tissue between the pharynx and the spine is very lax. The nasopharynx is extremely vascular and there is an abundant supply of lymphatic glands and vessels, especially in the posterior wall. The retropharyngeal lymph nodes form a chain on both sides of the median line of the pharynx, extending from its upper portion to its junction with the esophagus. They

lie between the prevertebral aponeurosis and the muscles of the pharynx.

The lymphoid ring is well developed at birth and often more so during infancy.

ACUTE RHINITIS.

The first disease of which I shall speak is acute rhinitis, or the common "cold in the head." This, while merely a disagreeable incident in childhood and adult life, is often a serious and sometimes a fatal malady in infancy, especially in the early months. Owing to the anatomical peculiarities already mentioned a comparatively slight swelling of the nasal mucous membrane completely closes the nose and entirely prevents nasal respiration. This, of course, necessitates oral respiration which the young infant performs very imperfectly, especially when asleep. In fact, sleep is so broken in many instances that the baby gets little if any rest and on this account loses strength very rapidly. The occlusion of the nares also prevents proper sucking and interferes a great deal with swallowing, even when the food is given with a spoon or dropper. Consequently the infant takes but little food or refuses it entirely, even if very hungry. The temperature in these cases is always elevated, usually irregular and very often high. Loss of weight and strength is very rapid as the result of the insufficient supply of fresh air, lack of sleep and deprivation of food, and in feeble babies may be so great as to cause death.

The following is an example of a moderately severe case of acute rhinitis in an infant of three months, that was in poor general condition as the result of an acute attack of gastric indigestion. She began to snuffle during the night of January 23 and slept poorly. Her temperature was 101°F. on the morning of January 24 but rose to 103.4°F. during the day, the pulse going to 160 and the respiration to 70. Nasal respiration was completely obstructed and she lay with her mouth open and her tongue out. She was able to swallow but took almost no food and slept scarcely at all. There was no improvement during the night of the 24th. The next morning the temperature was still high, while the pulse had risen to 180 and the respiration to 80. She was very weak and slightly cyanotic. In short, her condition was such as to justify great anxiety. Fortunately, improvement began at this time and continued to recovery.

The treatment of acute rhinitis may be divided into local and general, the latter being merely sustaining in character. Internal medication in my experience is of little use, although I think that tincture of euphrasia, in doses of two or three drops every hour,

is of some benefit in the early stage of watery secretion. Liquid albolene or albolene combined with menthol and camphor in the proportion of one grain of each to the ounce is the most useful local application. It is best introduced with a dropper, the infant lying on its back. In more severe cases a 1-5000 solution of adrenalin chloride introduced in the same way helps a good deal. It is rarely if ever justifiable to use cocaine at this age. In the severest cases it may be necessary to introduce a small rubber catheter into each nostril in order to keep the passage open and to enable the infant to breathe. I am sure that in one of my cases this procedure saved the baby's life.

The general treatment consists of fresh air, food and stimulation. Pure fresh air not only does not do a rhinitis any harm but does it much good, the general superstition to the contrary. If the infant cannot suck it must be fed with a spoon or dropper. If it does not take enough in this way it must be fed through a stomach tube. Strychnia and brandy are the best stimulants.

A complicating inflammation of the middle ear is very common in acute rhinitis because of the anatomical peculiarities already mentioned. Suppurative inflammation of the maxillary antrum almost never develops. It is impossible to tell, however, how common milder grades of inflammation may be. The frontal sinuses not being developed are, of course, not involved.

Acute rhinitis is, in my opinion, a contagious disease, communicable from one person to another. Since it may be such a serious and dangerous disease in infancy, babies should be kept away from adults and older children suffering from "colds" almost as carefully as from those with the eruptive diseases. Fresh air, either in the house or out of doors, does not cause rhinitis but is, next to the avoidance of exposure to other cases, the best preventive. A draft is hardly more dangerous. Babies that get plenty of fresh air both day and night and who are accustomed to go out in all sorts of weather have fewer "colds" than any others and bear them better when they do have them.

DIPHTHERITIC RHINITIS.

Diphtheritic rhinitis (membranous rhinitis) is much more common in infancy than is usually supposed. It is generally of a very mild type and is usually not suspected until other children come down with pharyngeal or laryngeal diphtheria, and often not even then. It is, perhaps, the most common source of the epidemics of diphtheria which develop in hospitals and institutions for infants and children. My experience at the Infants' Hospital has taught me to suspect every nasal discharge in an infant, especially if it is irritating. In spite of the greatest care in the admission of cases we found it impossible to avoid epi-

demics of diphtheria from this cause until routine immunisation was adopted. The babies now receive 500 units of antitoxin on admission and every three weeks thereafter. Since this practice was begun six years ago but one case of pharyngeal diphtheria has developed in the patients in the hospital, although many unimmunised nurses and nursery maids have come down with it and many cases of diphtheria have been discovered.

The symptoms of nasal diphtheria in infancy are, as a rule, very mild. There is usually a little snuffles with a slight nasal discharge and a little nasal obstruction. There is no glandular enlargement and the constitutional symptoms are wanting or very mild. The nasal discharge, however, is often rather characteristic, being thin, watery and acrid but, contrary to the usual statements, rarely bloody. It frequently irritates the upper lip, causing crusts about the nares and on the lip. A thin, watery, nasal discharge which irritates the lip should in an infant always be regarded with great suspicion. Such discharges should always be examined bacteriologically. The amount of the discharge varies markedly in different cases. There is almost never any membrane visible unless the speculum is used, and even then it may not be seen. The diphtheritic process practically never spreads backward and downward to the pharynx and larynx. The diagnosis must depend, therefore, in most cases on the bacteriological examination of the nasal discharge.

These cases must be isolated in the same way as cases of pharyngeal and laryngeal diphtheria. They should be given antitoxin freely. Alkaline washes introduced with a dropper, or in more severe cases with a syringe, are of some use. Strong antiseptic solutions should not be used.

In some instances, however, even in infancy, nasal diphtheria takes a more severe form. Even in these cases, however, the symptoms are due largely to nasal obstruction and not to toxemia and resemble very closely those of acute rhinitis. One of my cases in an infant of three months died in four days, apparently solely as the result of nasal obstruction and not of toxemia. No membrane was seen either by myself or by a throat specialist on several examinations. The true condition was not suspected and no bacteriological examination was made. The diagnosis of nasal diphtheria seems justified, however, from the fact that two or three days later the mother developed a very severe case of pharyngeal diphtheria.

ADENOIDS.

While the frequency and importance of adenoids in childhood is well recognised and their symptomatology pretty generally understood, this is not the case in regard to adenoids in infancy.

They are supposed to be uncommon and of little importance, and their symptoms are very commonly overlooked or misinterpreted. They are, however, very common in infancy and of great importance. Their symptomatology, while in many ways different from that in childhood, is nevertheless, fairly characteristic. The evil results which they produce are, moreover, even greater in infancy than in childhood. There is, unfortunately, a general feeling in the profession, even among the throat specialists, that adenoids should not be removed in infancy because they are liable to recur later. For this entirely insufficient reason the unfortunate babies are allowed to suffer, to have their development seriously or irreparably interfered with, and even to die. The fact is that, in the majority of instances, the adenoids do not recur, but even if they do and a second operation is required, that is no reason why the poor babies should be subjected during the interval to all the evils which adenoids produce, when they might be avoided by an early operation. The removal of adenoids in infancy is not a difficult operation and is practically devoid of danger. Certainly there is no danger connected with the operation which should be considered for an instant, in comparison with the evil and even dangerous results which adenoids may and often do produce at this age.

On account of the small size of the superior pharynx and post-nasal opening, even a small amount of adenoids may cause marked obstruction to nasal respiration. The seriousness of any interference with nasal respiration in the infant has already been noted in speaking of acute rhinitis. The constant deprivation of a sufficient supply of oxygen produces a condition of malnutrition which no method of feeding or mode of life influences in any way. No improvement can take place until the adenoids are removed or nature partially relieves the obstruction by the growth of the parts. Rickets is especially prone to develop in these cases and considerable deformities of the chest are sometimes produced. These are unimportant, however, compared with the general disturbance of nutrition. Another very serious result of the nasal obstruction is the interference with sucking. It is such an effort to suck that these babies take only enough food to satisfy the acute pangs of hunger. Lack of food, therefore, also interferes with their nutrition and development. The difficulty in nasal respiration makes them restless at night and interrupts their sleep, which again disturbs their nutrition. It is surprising how quickly and markedly they will improve in general condition after the adenoids are removed.

The following case shows most strikingly to what extent adenoids may disturb the nutrition in infancy and how great the benefit may be from their removal. This baby began to have

snuffles when he was about three months old and soon after to have a little difficulty in breathing, especially at night. He took his food fairly well but ceased to gain when he was $4\frac{1}{2}$ months old. He managed to sleep pretty well. His head began to sweat freely at $4\frac{1}{2}$ months and a week or two later the mother noticed that his head was "soft." About the same time he began to have frequent attacks of laryngismus stridulus, especially when taking his bottle. At five months he began to have convulsions. He was seen when six months old. He was then rather poorly developed and nourished. He was moderately pale and there were circles about his eyes. His mouth was open and but little air passed through his nose. There were marked craniotabes and a moderate rosary. The throat was normal to inspection but adenoids were felt with the finger. These were removed a few days later. He began to improve almost immediately. He had no convulsions or attacks of laryngismus after the removal of the adenoids. He took his food better and soon began to gain in weight. Two months later he was in splendid condition, the head solid, the color good, the mouth shut and the breathing quiet.

Adenoids are one of the commonest, if not the most common, cause of chronic "snuffles" in infancy. They are also almost always present in those babies that are subject to frequent "colds in the head," and are of great etiological importance in this connection. They are usually overlooked, however, because the baby does not keep its mouth open, snore at night or have the typical facies of adenoids in later childhood, there being apparently a very general impression that there can be no adenoids, or at any rate no adenoids of importance, unless these symptoms are present. This is not so, of course, frequent colds and chronic snuffles being almost as suggestive and characteristic of adenoids in infancy as these more marked symptoms are in childhood. The treatment of these affections is most unsatisfactory, moreover, unless the underlying condition is recognised. When this is done and the adenoids removed, the "colds" and "snuffles" cease almost immediately. Operation is not always necessary, however, as mild cases often yield to local astringent and stimulating treatment. I have found the following mixture very useful

R	Iodine	gr. $\frac{1}{4}$ to gr. $\frac{1}{2}$
	Camphor	gr. 1
	Menthol	gr. 1
	Benzoinol	oz. 1

Five to ten drops of this mixture are put into the nose with a dropper every three or four hours. This, by the way, is the best method of making applications to the nose and nasopharynx in infancy. Sprays are of little use at this age because of the

fright and struggling which they induce. The drops are best put in with the baby lying on its back so that they may run through into the nasopharynx. Although these cases are so common and the relief from proper treatment, especially from operation, is so striking, it hardly seems necessary to give illustrative cases, as the condition is easily recognised if it is only borne in mind.

Adenoids not only cause "snuffles" and "colds" but also very frequently an irritating cough without physical signs. This cough is especially troublesome at night. Here again, treatment, unless the real source of the trouble is recognised, is of no avail. Cough mixtures and throat sprays are useless. The cough can only be controlled by stupefying the infant with bromide or paregoric. Treatment of the adenoids or their removal, however, is almost immediately successful. The following case is an example.

A baby, 5½ months old, that had never gained very well and had taken her food poorly, began to have snuffles which were soon followed by a cough at night which kept her from sleeping. The throat and lungs showed nothing abnormal. Nasal respiration was fairly free and the discharge from the nose was insignificant. The adenoids were removed when she was seven months old. The cough ceased after 24 hours and never recurred. Improvement in her general condition also began at once and continued.

Adenoids are, either directly or through the colds which they induce, undoubtedly the most common cause of otitis media in infancy. Repeated attacks of otitis media are almost invariably due to adenoids and the attacks continue to recur until the adenoids are removed. The symptomatology of otitis media in infancy will be referred to later.

Adenoids are also a very common cause of sleeplessness and restlessness at night in infancy, even when there are no marked symptoms like mouth breathing, snuffles or cough. They should always be thought of when babies sleep poorly.

The development of adenoids opens the doors of the lymphatic ring of the pharynx still wider for the entrance of bacteria and their toxic products. They are, therefore, often accompanied by and are undoubtedly frequently the cause of enlargement of the cervical lymph nodes in infancy. These nodes are not infrequently tubercular. Tuberculosis of the middle ear may also be secondary to adenoids, whether they are or are not themselves tubercular. That tubercle bacilli may be present in and pass through adenoids at this age is shown by one of my cases in which, through a mistake in diagnosis, the adenoids were removed from an infant of 5 months during the early stage of tubercular meningitis, tubercle bacilli being found in the adenoid

tissue. The danger of tubercular infection from adenoids is, therefore, a real one and furnishes another reason for their removal.

PHARYNGITIS.

There is another condition in infancy which I have seen very often and which I have found very difficult to treat satisfactorily, but about which I hesitate to speak because I have never heard anyone else mention it, presumably because they have not thought it worth while. For lack of a better term I am in the habit of calling it "acute pharyngitis." The pharynx and fauces are usually only moderately reddened, but considerably swollen and markedly edematous. The condition never goes on to abscess formation. It is usually associated with a slight nasal irritation and snuffles. Cough is very troublesome especially during sleep, which is usually much disturbed. Paroxysms of difficult breathing, at times amounting to orthopnea, sometimes occur at night. Sucking and deglutition are interfered with and but little food is taken. The larynx is never seriously involved but a secondary bronchitis is not uncommon. The temperature is always elevated, usually moderately, sometimes considerably. The usual course is from a few days to a week, but it sometimes drags on for several weeks. Recovery is the rule but death sometimes occurs, apparently from exhaustion. Treatment is unsatisfactory. The iodine mixture, already spoken of, in the nose, is of some benefit. Glycerite of tannin applied locally with a swab has seemed to do more good than anything else. Drugs internally have proved useless. The chief reliance must be placed, however, on feeding, with the tube if necessary, and stimulation.

RETROPHARYNGEAL ABSCESS.

The retropharyngeal lymph nodes drain the cavities of the cranium, pharynx, nose and middle ear. They are, therefore, liable to infection from any of these cavities. Infection results, as with other lymph nodes, in simple adenitis or suppuration. Several nodes are usually involved in simple adenitis, but suppuration rarely takes place in more than one. Suppurative inflammation is accompanied by a cellulitis of the surrounding tissues. Owing to the looseness of the connective tissue between the pharynx and the spine large accumulations of pus are possible. Any of the pus-forming organisms may cause suppuration and the tubercle bacillus has been found in a few cases. Retropharyngeal adenitis always precedes retropharyngeal abscess. The symptoms of retropharyngeal adenitis are, however, not characteristic, being very similar to those of a pharyngitis. Inspection shows nothing definite but the enlarged nodes can usually be easily felt by the finger. Adenitis usually results in

resolution but occasionally goes on to suppuration. Originating, as it always does, in a single laterally placed node, the abscess is situated to one side of the median line and is in the lateral wall rather than in the back of the pharynx. It may be high up or low down according to the location of the node which is involved.

The first symptom of retropharyngeal abscess is usually unwillingness to take food or difficulty in swallowing. In the beginning this is probably due to pain, later to the mechanical obstruction of the tumor. Modification of the voice and difficulty with respiration next develop. These vary according to the location of the tumor. If the abscess is in the upper portion of the pharynx the cry is nasal and nasal respiration is chiefly disturbed. The mouth is kept open and the breathing is snoring and snuffling. If the abscess is low down the cry is laryngeal and the respiration is stridulous, like that in laryngeal spasm or stenosis. In these cases the respiratory murmur is diminished and many moist rales are heard. These may be due to a complicating bronchitis but are usually the result of the interference with respiration. In the acute cases the head is held in a most characteristic position from the first, the neck being extended and the head turned to one side. In the subacute cases this may not appear for some time. Swelling of the lymph nodes at the angle of the jaw on the affected side soon develops and may become very marked. The temperature is usually high and irregular.

The following case in an infant of 19 months, which developed under my observation, is fairly characteristic, although the swelling in the external lymph nodes appeared earlier than is usual. It was noted Nov. 10 that he was feverish, did not care to eat and kept putting his hands in his mouth as if it was sore. Careful physical examination, including inspection of the mouth and throat, showed nothing abnormal except slight enlargement of the lymph nodes about both sternomastoids. The temperature was 103°F., the pulse 160 and the respiration 56. The next day he held his head rather rigidly and cried if it was moved. The cervical lymph nodes were rather more swollen, especially on the left. The throat was still negative to inspection. The next day the head was held very rigidly and bent toward the left shoulder. The swelling of the lymph nodes was larger but the throat was negative both to inspection and palpation. The temperature ranged between 101°F. and 104°F. On the 13th he began to have a good deal of mucus in his throat, and digital examination showed a little indefinite soft swelling in the left side of the pharynx. The condition was otherwise unchanged. On Nov. 14 there was much difficulty in swallowing. The swelling of the cervical lymph nodes and the position of the neck remained unchanged. The swelling in the pharynx gradually increased but did not become distinctly elastic until the 18th, when it was opened and a teaspoonful of pus let out. The opening

closed during the night and the swelling was much larger on the nineteenth. It was then opened very freely and two teaspoonfuls of pus let out. He slept all the next night and began to take more food almost immediately. The abscess continued to discharge for 3 or 4 days longer and the swelling was entirely gone on November 26.

This case was operated on as soon as enough pus had formed to show where to make the incision, and none of the severe symptoms of retropharyngeal abscess had time to develop. The following case, seen in consultation, in which the condition was unrecognised and untreated, illustrates the symptomatology of neglected cases.

Five weeks previously an enlarged lymph node was noticed in the right side of the neck of a nine months old boy. This node gradually increased in size and others appeared. At the same time he began to take his food rather poorly, as if swallowing was difficult and painful. Finally he began to have some little trouble in breathing. The difficulty in swallowing and in breathing had steadily increased, so that during the last 48 hours he had been unable to swallow at all. When he lay down he immediately choked up so that he had to be held in a sitting position. At times the difficulty with respiration became so great, even when sitting up, that it was feared that he would suffocate. He had taken no food by the mouth for 36 hours. Rectal feeding had been attempted but the enemata were not retained. He had lost some weight and much color. The temperature had been moderate. There had not been much cough. There was no cyanosis when he was quiet, but when he cried it was marked. He could not lie down at all but was fairly comfortable sitting up. His mouth was wide open; the respiration, however, was not noisy. There was slight retraction of the epigastrium and supraclavicular spaces even when he was quiet. There was marked swelling of the lymph nodes on the right side of the neck, but no involvement of the surrounding tissues, fluctuation, redness or heat. The whole right side of the throat was filled up with a large red mass. The tonsil and soft palate were pushed well forward. Palpation showed that this mass reached high up into the nasopharynx, filled up the whole right side of the pharynx and extended downward over the larynx, leaving merely a chink through which the air entered. The larynx itself was normal, as were the heart and lungs.

The abscess was opened by a long, deep incision, the finger being used as a guide. Nearly two tablespoonfuls of dirty green pus were obtained. Relief was almost immediate. He began to breathe at once with his mouth shut, lay down and went to sleep. A few hours later he began to take food. Recovery was rapid and complete.

Although the symptoms of retropharyngeal abscess are usually so characteristic, they are very frequently misinterpreted.

If the obstruction is high up, they are most often mistaken for those of a simple pharyngitis or rhinitis, although diphtheritic paralysis is sometimes suspected. If the obstruction is low down they are often ascribed to laryngitis, either catarrhal or diphtheritic. In others, in which the signs of bronchitis are marked, the primary condition in the throat is entirely overlooked and the diagnosis of bronchitis or broncho-pneumonia made.

The chief reason that a retropharyngeal abscess is so often overlooked is that it is not thought of, and hence is not even considered in the differential diagnosis. Another reason is that inspection of the throat is trusted and palpation omitted. Inspection, however, is often insufficient and may lead to grave errors in diagnosis. In the majority of cases the tumor is visible, but not infrequently, especially if low down, it cannot be made out. It can always be felt if present, although if it is situated low down the finger must be introduced very deeply. In no case in which the symptoms in any way suggest a retropharyngeal abscess should palpation of the pharynx be omitted. In fact, it should always be done in every case in which there are symptoms of respiratory obstruction and also in all cases in which the symptoms point to the respiratory tract but in which the physical signs do not satisfactorily account for the symptoms. It causes the infant only temporary discomfort and may prevent very serious mistakes in diagnosis. The swelling is usually situated in the side of the pharynx but may be at any level. It is either tense and elastic or fluctuating. The examination of the throat should be made with a tongue depressor and not with a gag, as immediate death has in several instances followed the introduction of a gag. Death under these circumstances is probably due to some disturbance of the vagus from the pressure of the abscess.

A sudden attack of dyspnea may sometimes be the first symptom to call attention to the local condition in the throat. In feeble infants a small abscess may develop so insidiously as to cause neither general nor local symptoms.

The prognosis of retropharyngeal abscess depends largely on the treatment. The usual termination in untreated cases is in death. This may occur slowly as the result of progressive weakness or asphyxia, but more often suddenly from laryngeal spasm or some disturbance of the function of the pneumogastric nerve. The abscess seldom opens spontaneously. If it does, and the opening is into the pharynx, death may result from suffocation or from a consecutive inspiration pneumonia. The pus may burrow in various directions, sometimes opening externally and occasionally into the middle ear or external auditory canal. In a few instances the carotid artery has been opened. The prognosis in cases which are properly treated, that is, by incision,

is very different, however, the mortality in such cases being only about five per cent.

The true condition is seldom recognised early enough to have cold applications externally do any good. It is much more reasonable to endeavor to hasten suppuration by the use of poultices and hot applications to the throat. Spontaneous evacuation should never be awaited. The abscess should be opened as soon as the evidences of suppuration are present. It does no harm to make an incision even before this happens. Incision through the mouth is much preferable to incision through the neck. The drainage from the internal incision is almost always satisfactory and, if not, can be made so by another incision or by dilating the original one. Secondary infection through the wound, while possible, is so unusual that it ought not to be considered in any way to contraindicate the internal incision. The external operation is a delicate one and requires a skilful surgeon and assistants, while the internal operation can be performed by any physician at any time without skilled aid. The external operation, moreover, requires dressing and leaves a scar, while the internal calls for nothing but cleansing of the mouth and the occasional expression of the contents of the abscess with the finger.

The incision is best performed with the infant in the upright position. If it is tipped forward the instant the incision is made there is no danger of the pus entering the air passages. The knife should be guarded except at the point. A gag should never be employed because of the danger of sudden death from its use, but the mouth held open with the finger or a tongue depressor. With these also care must be taken not to open the mouth too widely. It is usually well to enlarge the incision with the finger in order to favor thorough drainage. The abscess should be squeezed once or twice a day with the finger in order to keep up drainage and to prevent the opening from closing. The mouth should be washed out from time to time with some mild anti-septic solution.

OTITIS MEDIA.

While, strictly speaking, otitis media is not a disease of the nasopharynx yet it is in infancy so almost invariably secondary to diseases of the nose and nasopharynx that it seems justifiable to speak of it in this connection. The anatomical peculiarities of the nose, nasopharynx and Eustachian tubes in infancy, already referred to, explain the frequency of otitis media at this age. In some cases the catarrhal inflammation undoubtedly extends directly up the Eustachian tube, while in others the primary lesion is probably a blocking of the tube with a secondary inflammation. There is no condition in infancy, I think, regarding

which there is a more general lack of knowledge among the profession as a whole and a more general misapprehension as to the symptomatology than otitis media. Very few physicians seem to realize the frequency of this condition in infancy and its importance in differential diagnosis. I have learned to look for it in all cases of doubtful diagnosis and to consider it as a possible cause for any symptoms not otherwise easily explainable in the course of other diseases. No physical examination in infancy, in which other definite signs sufficient to account for the symptoms are not found, should be considered complete without an examination of the ears. They should be considered especially when there have been, or are, diseased conditions of the nose or nasopharynx present, even if these are very slight.

One reason why otitis media is so frequently overlooked is, as already stated, the general misapprehension as to the symptomatology of the disease at this age. Physicians are constantly on the lookout for earache and tenderness over the mastoid and, if they do not find them, rule out trouble in the ear without further investigation. On the other hand, they rarely think of inflammation of the ears as the possible explanation of an obscure fever or of peculiar symptoms without obvious cause. Many infants with acute inflammation of the middle ear, however, show no signs of pain at any time, and many others, who evidently have pain somewhere, show nothing by their actions which will attract the attention of the physician to the ears. Babies with earache rarely put their hands to their ears. On the other hand, sick babies are very likely to wave their arms about, to grab at their ears and pull their hair. The usual symptoms of earache are sharp cries, restlessness and inability to sleep. Apparent tenderness on pressure over the mastoid is another most unreliable guide. Tenderness over the mastoid is very unusual in simple acute inflammation of the middle ear, and, on the other hand, most sick babies will cry out if firm pressure is made on any part of their body. Mastoid inflammation is very rare at this age on account of the undeveloped condition of the mastoid cells. Tenderness over the mastoid can, therefore, hardly be expected. In fact, in most of the cases of otitis media in infancy there are no symptoms which attract attention directly to the middle ear as the cause of the trouble. Acute inflammation of the middle ear is usually, but not always, associated with fever, which is often very high. It is also very commonly associated with reflex nervous symptoms which direct attention away from the ears to other parts of the body. Among the more common of these reflex symptoms are rapid respiration, vomiting and tenderness and rigidity of the neck. Convulsions are not very infrequent. On account of these reflex symptoms almost every

disease but the right one is suspected, among which may be mentioned meningitis, pneumonia, gastritis, worms and dentition.

The following is a fair example of the ordinary case of acute otitis media, there being nothing about the symptoms to direct the attention to the ear except a slight "cold in the head." An infant, 13 months old, had had a slight "cold in the head" with loss of appetite for several days but no fever until the day before. During the previous night she had been hot and restless and in the morning was somewhat drowsy and stupid. She coughed a little as if her throat was sore and refused her food. Careful examination showed nothing abnormal except slight enlargement and reddening of the tonsils. The temperature was 103°F., the pulse 160 and the respiration 60. Further examination showed reddening and bulging of both ear drums. The ears were opened in the afternoon with a free discharge of pus from both. The temperature dropped to 99°F. and the pulse to 120 during the next twelve hours.

The following cases show how marked and how confusing the reflex symptoms of otitis media may be and how easily they may draw attention away from the real seat of trouble. A six months old baby was taken suddenly sick Feb. 18th with fever, cough and difficulty in breathing. He lost his appetite but showed no other symptoms of gastroenteric disturbance. He was taken to a physician Feb. 21st who found the temperature 104.2°F., the pulse 160 and the respiration 52. He sent the baby to the Infants' Hospital with the diagnosis of pneumonia. The physical examination was not made until the next day. The temperature was then 100°F., the pulse 115 and the respiration 38. The physical examination was entirely negative and while the picture was not that of a pneumonia and the lungs were negative, the disproportion between the rate of the pulse and that of the respiration pointed to a certain extent to some pulmonary trouble. That night the temperature and pulse rose rapidly while the rate of the respiration remained the same, thus pointing much less strongly to the lungs. The next day, the 23d, the ears were examined and considerable reddening of the right membrana tympani was found. Bulging occurred the next day. Paracentesis was performed and a small amount of pus let out. The left drum was also reddened but did not bulge. The temperature immediately dropped and showed a tendency to run lower. On the 26th, however, it rose again, as did the pulse and respiration, the respiration rising again out of proportion to the pulse. Nothing could be found in the lungs, however. Examination of the ears showed that the right ear was not discharging freely and that the left drum was bulging. Paracentesis was done on the left ear and the discharge re-established in the right. The temperature and pulse dropped immediately and were followed in 24 hours by the respiration, all remaining normal afterward. In this case the onset and general picture

in the beginning was those of pneumonia and although nothing abnormal could be found in the lungs, the disproportion between the pulse and the respiration continued to point strongly toward them. The diagnosis would have remained obscure without the examination of the ears.

A baby, 6½ months old, was very fussy for 24 hours, was constantly putting her hands in her mouth, cried if her hand was taken out of her mouth and acted as if her mouth was painful. The temperature was 105.2°F. The physical examination, which did not include the ears, showed nothing abnormal except a slight swelling of the gum over the lower middle incisors. A diagnosis of difficult dentition was made and the gum lanced over the lower middle incisors. Lancing the gums was followed by temporary relief, but within 24 hours the temperature was up again and all the symptoms had recurred. The ears were then examined and reddening and bulging of the left drum found. Paracentesis was followed by a profuse sero-sanguinolent discharge with marked relief of the symptoms and a rapid fall in the temperature, which did not rise again. In this case it would have been very easy to have continued to attribute all the symptoms to difficult dentition, as was done when the infant was first seen.

In the following case the symptoms were most unusual and misleading, all pointing to some obscure cerebral condition, either acute or chronic. The true condition was not suspected, although the patient was seen by a number of men, all of whom were well aware of the importance of ear disease in infancy as well as of the variety of its symptomatology.

A baby, aged 15 months, had a good family history. There was no history of nervous or mental disease or anything to suggest syphilis. She was delivered by instruments, the head presenting, and was normal at birth. She had always been well except for chicken-pox at 13 mos. Her parents said that she was unusually bright mentally. She had walked alone for a month or more.

On Dec 13 she tripped on the floor and fell, striking her head on a chair. She did not appear to be much hurt. Dec. 22d she began to have "convulsions" which continued up to the time of entrance to the Infants' Hospital, Dec. 30. She had a slight cold and vomited several times daily. The bowels moved daily and the movements were normal. She was in good general condition but there was moderate pallor of the skin and mucous membranes. There were no evidences of rickets. The fontanelle was 1 ½ cm. in diameter and slightly depressed. She did not open the left eye quite as wide as the right but closed both vigorously. The motions of the eyes were normal and the pupils reacted quickly to light. She both saw and heard. There was no rigidity of the neck or back. There was no spasm or paralysis of the extremities. The knee-jerks were equal and somewhat exaggerated. Kernig's sign was absent. All the organs were

normal. The urine was pale, acid, of a specific gravity of 1008 and contained no albumin.

She slept well and was perfectly quiet when asleep. When awake there was almost always tremor of the head and arms, although she was sometimes quiet for a short time. This tremor was rhythmic and very rapid. It was most marked in the head and arms, although it was also present in the body and legs. She was very easily excited and frightened. She then became rigid and threw herself about, crying loudly. The cry was interrupted at short intervals but the rhythm was much less rapid than that of the tremor. In these attacks the tremor was much more marked and more rapid. In some of the attacks there was also nystagmus, usually lateral, but sometimes vertical. The temperature was normal at entrance and never went above 99.6°F. The pulse and respiration were somewhat rapid for the first two days, but afterward showed nothing worthy of note.

Her stomach was washed out and her bowels moved with castor oil. The vomiting ceased at once and did not recur. The movements were normal. Moderate doses of bromide and chloral had no effect. Her condition continued unchanged and there was no change in the physical signs. The fundi of the eyes showed nothing abnormal.

She was seen by three specialists in nervous diseases, all of whom agreed that the fall was a coincidence and that there was no acute cerebral process. They said that the history of normal mental development must be wrong and that only a congenital cerebral defect could account for the symptoms. The medical men who saw her did not agree with this diagnosis but also ruled out meningitis and injury as the cause of the symptoms. They were, however, unable to make any diagnosis.

Her ears were examined Jan. 4th as part of a routine examination of all the babies in the hospital. Both drum membranes were generally reddened and bulged in their upper posterior portions. Paracentesis showed pus on both sides. Improvement was almost immediate and after the first few days was very rapid. The ears were normal on Jan. 14th and she was discharged well a few days later. There has been no return of the symptoms.

In the following case the location of the reflex symptoms led to a diagnosis of cervical Pott's disease and later to one of meningitis.

This baby, 16 months old, had a good family history, had always been well and had never been exposed to tuberculosis. She began to be fretful and irritable August 9. She did not move about as much as usual and preferred to lie as quiet as possible. She cried out when moved and also many times in the night. Her appetite became poor and she lost weight steadily. There was a slight diarrhea at first, but after a week the movements became normal in number and character. August 21st she began to hold her head backward and the neck was

rigid and tender. She was sent to the Children's Hospital Aug. 22 with the diagnosis of cervical Pott's disease. During the next two days her temperature ranged between 103°F. and 104.6°F, the pulse between 120 and 130 and the respiration between 25 and 30. She continued to hold her head backward and rigidly and movements of the head caused pain. No new symptoms developed. The surgeons ruled out cervical Pott's disease but suspected meningitis.

She was in good general condition. She looked and acted sick but although very fretful was perfectly conscious. The anterior fontanelle was 1 ½ cm. in diameter and level. The pupils were equal and reacted to light. The throat was slightly reddened. All the organs were normal and there were no evidences of rickets. There was no spasm of paralysis of the extremities. Kernig's sign was absent. The knee-jerks were not obtained. She held her head a little backward and motion forward was resisted and seemed to cause a little pain. The cervical lymph nodes were slightly enlarged. The urine was normal. The white blood count was 20,000.

Examination of the ears showed reddening and bulging of both drums. Paracentesis was followed by a free discharge of muco-pus with almost immediate relief of the symptoms.

Since there is so little characteristic about the symptomatology of otitis media in infancy, and since the symptoms are so misleading, this condition should be considered in every acute illness at this age and the ears examined. The only way to determine satisfactorily whether or not there is inflammation of the middle ear is to examine the ear with a speculum. All other methods of examination are incomplete and necessarily misleading. The examination of an infant's ears is not, however, a simple matter and requires considerable experience. The results, however, are well worth the time required to master the technique. The method of introducing the speculum rendered necessary by the anatomical peculiarities of the external auditory canal at this age, has already been referred to. A smaller speculum than comes with most sets is necessary. The infant should be held firmly in the nurse's lap, sitting sideways, with the head against the nurse's breast. Unless there is plenty of daylight, a kerosene lamp will be found more satisfactory than anything else in examining the ears.

In cases of a more subacute type, the symptoms are mainly those of confined pus, and the hectic temperature, often associated with chills, and the apparent absence of a local cause often lead to the diagnosis of tuberculosis or malaria.

The following case of this variety was mistaken for malaria. A boy, 22 mos. old, who lived in a malarial district, had always been delicate and pale. He had had a cough since an attack of bronchitis three months before and had also had a slightly

elevated temperature during this time. During the last two weeks he had seemed worse and the temperature had ranged higher. The night before he was seen he had had a chill, followed by a temperature of 105°F., and sweating. Nothing abnormal had been found on physical examination except pallor and slight enlargement of the spleen. The urine showed nothing abnormal.

An almost positive diagnosis of malaria had been made on the basis of the chills, fever and sweating, the enlargement of the spleen, the pallor and the apparent absence of any cause for the symptoms. Examination of the blood showed no plasmodia and 30,000 white cells, a finding entirely inconsistent with malaria.

An examination of the ears, which had hitherto been overlooked, disclosed the seat of trouble. Pus was found on both sides and evacuated. Improvement was continuous and rapid from that time.

In other cases the inflammation may run its course with little or no rise in temperature and with very slight constitutional, local or reflex symptoms, a discharge from the ear being the first thing noted. This is especially likely to be the case in feeble babies, the amount of reaction apparently depending a good deal on the general condition of the infant.

The following cases are examples. A boy, 3½ months old, had always been improperly fed and had always had colic, vomiting and diarrhea. He had recently lost weight very rapidly. He was admitted to the Infants' Hospital March 12th. He was fairly developed and nourished but rather pale. Physical examination was negative except for a slight rosary. A routine examination of the ears a few days after entrance showed nothing abnormal. He responded very quickly to proper food, stopped vomiting, and after a few days had normal movements but did not gain in weight. On March 26th the temperature suddenly rose to 102.8°F. The pulse and respiration did not rise, however, and no other symptoms developed. Nothing abnormal was found on physical examination until the ears were reached, when both drums were found slightly inflamed. No treatment was instituted. The inflammation in the ears rapidly subsided in the next 24 hours and with it the temperature fell to normal and remained there.

A three months old baby entered the Infants' Hospital March 7th. No history came with her. She was emaciated and the skin was mottled. The anterior fontanelle was small and depressed and there was a slight rosary. The physical examination was in other respects negative. She took her food well, seldom vomited, had nearly normal movements and gained in weight. She had no fever at any time and showed no symptoms pointing to aural trouble. Nevertheless, a discharge from the right ear appeared March sixteenth.

Much has been written as to the importance of the patency of the petrosquamosal suture in infancy, as favoring the extension of inflammation from the middle ear to the meninges. This danger has, in my experience, been very much overestimated, and can, to all intents and purposes, be disregarded. The mastoid antrum is present at birth, but the mastoid cells are almost never developed during infancy. Mastoid inflammation is, therefore, infrequent in connection with inflammation of the middle ear at this age, and if it occurs is usually not as serious as in later life.

The proper treatment of otitis media in infancy requires more knowledge of the ear than is possessed by most general practitioners. It requires special knowledge to determine whether or not a given case requires paracentesis or whether it will quiet down under simple measures. In general it is far wiser in a doubtful case to err by doing an unnecessary paracentesis than by letting it go without operation. Local treatment should be extremely simple: irrigation with warm water, heat externally, bromide internally. Under no conditions should oily substances be introduced into the ear and it is rarely advisable to use any local medication. Paracentesis is not a difficult operation, providing the drum membrane can be distinctly seen. It is almost impossible to do any harm by a paracentesis, if reasonable care is exercised. It is, therefore, a safe operation for the general practitioner. He should be prepared for it and ready to do it whenever necessary.

70 BAY STATE ROAD.

DIAGNOSIS OF EARLY PREGNANCY WITH REFERENCE TO A PARTICULAR SIGN.—Louis J. Ladinski (*Medical Record*, April 13, 1907.) claims that it is always possible to make a positive diagnosis of pregnancy as early as the fifth or sixth week when intrauterine. The diagnosis is made by a single sign. This is the appearance of a spot of a peculiar softness and elasticity just above the junction of the body and cervix in the anterior wall of the uterus, in the fifth or sixth week. When the uterus is retroverted or retroflexed it appears in the posterior wall, and at the sixth or seventh week of pregnancy. In incomplete abortion or subinvolution this area of softening appears, but is much more doughy and less elastic. With a hard fibroid in the upper portion of the uterus there is a similar spot, but the softness is only relative. With a soft myoma in the front of the uterus the feeling is exactly that of pregnancy. The sign must be sought by bimanual palpation. Absence of this sign absolutely excludes uterine pregnancy. The sign aids in making a positive diagnosis of extrauterine pregnancy by excluding uterine pregnancy. It is in all probability due to extreme vascularity of the uterine wall at the point where it is felt.

PROGRESS IN MEDICAL SCIENCE.

Forensic Medicine.

Reported by E. S. McKEE, M.D., Cincinnati.

CRIMINAL RESPONSIBILITY OF THE INSANE.

D R. F. E. DANIEL, editor of the Texas Medical Journal, discusses this subject *in extenso* in his journal. He says that there is a wide-spread and growing conviction that the reform of the criminal law is a pressing necessity. The inefficiency of our penal statutes is due to the fact that they are made by men who, for the most part, make no pretensions to scientific knowledge and are notoriously adverse to being advised. The unwise practice in some states of paying legislators day wages is, in a measure, responsible for this. Such pay is not calculated to command a high order of law making talent. That the jurisprudence of insanity is far behind the present status of medical science on this subject is very generally admitted; it belongs to a past age and is therefore not adapted to the needs of a latter-day civilisation. The crude division into idiots and lunatics of two centuries ago survives in jurisprudence today. What other course than that of medical science should our law makers follow in legislating upon a subject better understood by physicians than by any other class of investigators? There are forty-four forms of insanity known to alienists.

From the standpoint of the medical jurist the jurisprudence of insanity is defective in at least three particulars: First—the defendant in a murder trial has not the benefit of a diagnosis by the light of modern science, because recent discoveries and conclusions of medical science are not comprehended in the existing system. The laws have not been made to conform thereto, nor do the courts permit textbooks, the standard authorities, to be quoted in support of alleged insanity. Second—the law leaves to the determination of a jury, often of unenlightened men, metaphysical questions that baffle the ablest scientific minds, to wit, the existence or non-existence of insanity, the degree of impairment of free will, and the extent of responsibility of a person adjudged insane by medical experts. Third—the courts do not exercise proper discrimination in allowing medical men to pose as experts. There should be a medical court in every state, paid by the people, to whom should be left the adjudication of all points of medicine in its relation to law, just as we have courts of law to settle all legal points. Trial by jury is a relic of barbarous ages, and has degenerated in a large number of instances into a travesty of justice. If accused of a crime I had rather trust my fate to the toss up of a penny, than to

stand trial by a jury to whom is given the determination of questions so far beyond their comprehension.

Our penal system is based upon the ancient law "an eye for an eye and a tooth for a tooth." Vengeance seems to be the chief end,—retaliation rather than justice. Our system of jurisprudence should not only be humane, it should be intelligent. The protection of society, the deterring of criminals, and the lessening of crime are the ostensible objects of capital punishment. It is a demonstrated failure. The ends can be secured by means less revolting. I am well aware that the hope of instituting radical changes in a system so universal and so long established is Utopian; but were everybody content with the existing condition of things there would be no progress in any department of human activity—in law, medicine, art, science, literature, finance or commerce. No errors would be corrected, no evils eradicated. Hence, when human life so often depends upon rules of the court based upon an antiquated conception of insanity, it is needful to insist that the voice of science shall be heard, and that the great truths revealed by the laborious investigation and experimentation, truths vital to the dearest interests of mankind, shall be utilised in medical and criminal jurisprudence. Our system needs to be remodeled, made more comprehensive, and adapted to the changed condition of the knowledge of insanity and to the demands of an advanced civilisation.

SUCCESSFUL SOOTHING SYRUPS.

THE journal of the American Medical Association, February 9, 1907, reports the following: Death of a child of 10 months from Mrs. Winslow's soothing syrup reported by Dr. John E. Campbell, South St. Paul, Minn. The death of a child from Rex cough syrup is reported by Dr. Thos. C. Buxton, Decatur, Ill., coroner of Macon County. Dr. J. Elliott Dorn, Brooklyn, reports the death of a child from Monell's teething syrup. Dr. Jesse R. Cooper, New Castle, Pa., reports the death of the twin children of Joseph Minolich, of New Castle, Pa., from opium poisoning, the result of taking Kopp's Baby's Friend. The father was agent for the preparation.

WAIVER OF PRIVILEGED COMMUNICATION BY HEIR.

IN the case of Sibley vs. Morse, Supreme Court of Michigan, a physician was called to testify as to the mental condition of testator at the time two codicils were drawn to his will. On cross-examination the physician was asked as to his having treated testator for urethritis. Excluded on objection. The con-

tention was then raised that testator's son, as heir-at-law, might waive the statute protecting the patient from the discovery of facts learned by the physician while treating him. But whether the heir can, against the protest of legal representatives (as executors, etc.,) waive the right, the court does not decide, on the ground that it was not necessary to do so in this case. It says, however, that there is authority supporting the contention that he may do so. (*Thompson vs. Ish* 99 Mo. 160). The reason given why it was unnecessary to decide the question here was that in any view of the case the court thinks the testimony in question was too remote to be of any value in determining the mental condition of the testator a number of years later, and no error was committed in its exclusion which prejudiced the rights of the contestant.

CONSENT TO OPERATION.

THE supreme court of Illinois has had this subject before it recently in the case of *Pratt vs. Davis*. The result of this trial emphasises the necessity of surgeons having a clear understanding of their legal liabilities in undertaking important operations, and the prudence of requiring explicit consent of the patient or his legal representative before beginning an operation. The decision covers three points of much interest to surgeons: First—what is sufficient consent to an operation? Second—How much is implied in consent once given? Third—What is the privilege and duty of the surgeon in emergencies arising in the course of an operation undertaken with previously obtained consent?

The case in question was as follows: patient, married, aged 40, had suffered from epileptic seizures for 15 years; came with her husband to a sanitarium for treatment. There was found laceration of the womb and other conditions which required surgical interference. She was operated on for these conditions and sent home but was not improved. She was then told to come back to the sanitarium for further operation. The surgeon then removed her womb without expressly telling her that he was going to do so or gaining her consent or that of her husband, though the latter was implied.

The patient was no better but rather grew worse and later was adjudged insane and sent to an asylum. Suit for damages was instituted for removing the uterus without consent, and a verdict for three thousand dollars given. The Supreme Court affirmed the decision of the Appellate Court. The decision of the court on the third point is of importance; for it tends to put the duty of the surgeon in the course of an operation already under-

taken in a clearer light. It is the duty and legal right of the surgeon in the presence of unexpected complications, arising in the course of an operation, to use his highest skill and judgment even if the consent of the patient or his representatives can not be obtained. It is also the right and duty of the surgeon to act in accordance with the best teachings of surgery in emergencies in which consent cannot be obtained, even to the extent of performing operations.

FALSE PRETENSES IN PROMISING IMPOSSIBLE CURES.

A FARMER suffering from epileptic fits was promised a sure cure by a firm treating by electricity. He was told that it was a lucky thing for him that he came when he did, that he would have been beyond the reach of relief in another month. The ordinary cost of the treatment was one hundred pounds, but as he was a poor man they would do it for forty pounds. Of this ten pounds was paid down, but no treatment was given. He afterward learned of the impossibility of a cure from his condition, idiopathic epilepsy, and sued for the return of the money. The court ruled that by guaranteeing to do something which was impossible, the firm had obtained money under false pretenses, and a verdict was given for the money with costs.—Australasian Medical Gazette.

MAL-PRACTICE SUIT ENDED.

IN the case of Mrs. Hixon vs. Dr. John W. Rabe, Akron, O., the jury returned a verdict for the defendant on technical grounds without leaving the box, in accordance with the instructions of the court.

TO STOP QUACKERY.

A COMMITTEE has been appointed by Dean Remington, of the Philadelphia College of Pharmacy, to frame a bill to go before the Pennsylvania legislature to secure the passage of a pure food and drug law. The provisions of the bill are to be similar to that enacted by the federal government. The movement was inaugurated by the druggists and physicians of Philadelphia.

PHYSICIANS TO REPORT ACCIDENTS.

WISCONSIN has a law requiring physicians to report accidents, as the state is desirous of classifying accidents. The statistician believes that physicians are very negligent in making these reports.

VARIOUS VALUES OF PHYSICIANS' SERVICES.

THE Supreme Court of Colorado discusses the criteria governing the value of medical services. The value of professional services may depend considerably on the character and standing of him who performs them. Diversities of gifts, period of time passed in the profession, the experience, degree of skill and faculty of using professional knowledge, should be considered. The services of some are worth more than the services of others, because they will command more. Evidence of professional standing is clearly admissible. The fact that a doctor is very busy tends to show his professional standing. If constant practice in the art of his profession renders a practitioner more capable than he otherwise would be, the extent of such practice is a matter which may be properly inquired into for the purpose of determining the value of the services.

A RESPONSIBLE LUNATIC.

A CITIZEN of Kentucky was recently placed on trial by a jury at his own request and sent to the asylum on his own testimony. He said that he had distinct impulses to kill his wife and children and burn his house and then kill himself. He feared these impulses would be so strong that he would be unable to resist them, hence his application to the court to be sent to the asylum, which request was quickly granted. He manifested great joy that he was to be restrained in such a manner that his wife and children would be safe. Such a case as this raises the point as to accountability, particularly as to the right and wrong test. If this man had killed his family he would have been held legally accountable under certain applications of the right and wrong test, which holds that if the man knows the nature of and quality of the act and knows that it is wrong, then he is to be punished. The fact that he recognised the act as wrong showed that he was rational, hence the court committed a man to the asylum who was rational, a gross miscarriage of justice, though it possibly saved lives.

BODY EXHUMED AS A RESULT OF UNFOUNDED ATTACK ON
PHYSICIAN.

SOME eight months after the death and interment of a widow, aged 63, in London, the brother of the deceased made affidavit that the physician was in a great hurry to get the body buried. He also said that he believed that the death of his sister was due either to the administration of improper drugs or to incorrect treatment. At the inquest which was held the doctor stated that he had first treated the woman for dyspepsia in 1898. Three

years later symptoms of cardiac degeneration set in. In 1904 Dr. Rose Bradford saw the patient with him and concurred entirely with the treatment. As to the funeral, he had nothing to do with it. Evidence was given by Dr. Wilcox of the home office analysis, and Dr. F. J. Smith, professor of Forensic Medicine at the London Hospital, that the body showed no evidence at all of poisoning. The jury rendered a verdict that the certificate given by the doctor was correct and that there were no grounds for the imputations made.

THE PATRICK CASE.

THE Patrick case in New York (*Wisconsin Medical Recorder*) is still attracting considerable attention. Mr. Wm. M. Rice, aged 84, died from what his attending physician ascribed as natural causes. Within two hours after his death the body was embalmed with "Falcon embalming fluid, which contains formaldehyde gas in solution. The autopsy forty-one hours later and following was found left lung congested and edematous; the right lung the same, and a small area of consolidated lung tissue about the size of a twenty-five cent piece in lower lobe." The prosecution claimed that this congestion of lungs was due to chloroform administered by Patrick. Expert testimony was arrayed on both sides. The Medico-Legal Society of New York became so interested in the subject that they appointed a committee to report on the case. One of the points that they were to report on was: "Could the injection of this embalming fluid two hours after death, before rigor mortis set in, cause this congestion of the lungs?" They answered that it could not, but it could cause a condition that could not be differentiated from congestion with the naked eye. The medical testimony cannot be reviewed in the Supreme Court but it is within the province of the governor to appoint a commission to report on the case.

ABSTRACTS.

Pyrenol in the Treatment of Influenza

IN the Berliner klin, Wochenschrift, Feb. 11, 1907, Braeunig refers to the paper by Steiner on the pyrenol treatment of influenza (*Fortschritte d. Medizin*, Vol. 23, No. 15). Steiner found in hospital and private practice that pyrenol reduces the temperature and leads to a rapid termination of the process free from complications. Similarly, it acts as an antipyretic and sedative in pertussis, also influencing the diseased mucosa, and thus fulfils two indications at once. He especially emphasises

the absolute harmlessness of the remedy, even with children of less than one year.

Braeunig adds that the paper tells nothing new, for the beneficial effect of pyrenol in these diseases is well known. He also has found it to do good service in similar cases, as well as in the hectic fever of phthisis in which,—given at the right time,—it forestalls the high evening temperatures, without causing the very annoying diaphoresis which follows the use of other anti-pyretics.

Antisclerosin for Administration of Blood Salts.

PRIVY COUNCILLOR SENATOR says in the *Russische med. Rundschau*, January, 1907, that antisclerosin is the simplest and most convenient method of administering the blood salts, the use of which is based on the work of Dennstedt-Rumph and Ludwig Weil. The antisclerosin tablets contain chiefly sodium chloride, as also sodium sulphate; sodium phosphate, sodium carbonate, magnesium phosphate and calcium glycerophosphate,—all in about the proportion in which they are normally present in the blood. The initial dose is two tablets daily and is gradually increased to six daily. If the dosage is slowly increased, the antisclerosin is well borne. Though the causal relation of salt impoverishment of the blood to arteriosclerosis is not yet wholly explained, salt impoverishment is certainly an abnormal condition. The careful employment of the blood salts can only be of benefit.

ASPIRATION IN OTITIS MEDIA ACUTA.—Percy R. Wood (*Medical Record*, April 13, 1907,) advocates aspiration of the drum head in acute otitis media to secure drainage and control the infection. The disease is generally the result of infection in the acute infectious diseases, or arising from the pressure of adenoid growth in the nasopharynx, which always foster the retention of bacteria near the mouth of the Eustachian tube. When drainage is not secured, chronic disease of the middle ear and mastoid generally result, brought about by the retention of the secretions of the acute process. Early paracentesis, after applying a mixture of menthol, cocaine, and carbolic acid, is painless, and the wound heals in a few days. By means of a middle ear aspirator, described by the author, quantities of pathological secretions may be removed. Warm camphorated vapor is sent through the Eustachian tube, the meatus dusted with boracic acid, and packed with iodoform gauze, and the pharynx painted with 2 per cent. nitrate of silver solution. Dressings should be replaced daily.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 238 DELAWARE AVE., BUFFALO, N. Y.

VOL. LXII.

MAY, 1907.

No. 10

The Thaw Case.

NOW that the unsavory Thaw case has been temporarily shelved by the disagreement of the jury which listened for seven weeks to the salacious details of a chorus girl's frivolities, to place the description in the category of mildly stated conditions; now that they have waded through the confusing opinions of men of science whose mental studies of the mind of the prisoner were kaleidoscopic, and have had inflicted upon them a two day's summing up on the part of a gentleman of perfervid eloquence and maudlin mushiness, there are several points accentuated by the trial which demand consideration—and radical change. Without going into the intimate details of the testimony to any great degree, one must be impressed with the fact that two great evils are existent in present day methods of criminal trial. One, and the foremost, is the absolute ill-treatment accorded jurymen. Here, after seven weeks of intolerant bickerings and squabbles, in the bitterness of which the prisoner and the central idea of criminal trial were lost sight of, the jury was locked up for forty-eight hours. True, they were fed, but they were given no opportunity for sleep; they did not have a change of clothing and from weariness they were quickened to irritability and thence to the verge of violence, and the disgraceful spectacle was presented of two men with hands raised against one another over the question—not as to the guilt or innocence of the prisoner, but as to whether the views expressed and the ballot cast by one of the jurors was honest. It was not a serious difference based on serious argument; it was merely an explosion of irritability which culminated after many hours of torturing confinement. No man, except he be an unusual almost uncanny creation, can be expected to act with judgment and wis-

dom unless he have physical rest, and this fact was never better illustrated than in the trial which has just been finished at great expense and without satisfactory result.

The next most prominent feature demanding change, and one which will very likely be corrected by a bill now before the legislature, is the law governing the giving of expert testimony. Here was a picture of a prosecution and a defense, both financially able and willing to take fullest advantage of the rules governing expert evidence and there was presented the sorry spectacle of sober, serious, scientific, savants sitting suavely in court awaiting their turn to go on the stand and give evidence for their hire. One cannot blame the layman for asking why, if a man is sane or insane the fact cannot be coldly stated by experts; and again the query is raised, of what use is a commission in lunacy which is composed of two laymen and one physician, especially when it would appear from the published reports that the latter's opinion was either forced or ignored altogether? On the Thaw side were several eminent men whose years have been spent in the study of insanity; on the side of the prosecution were men equally learned. Yet, Thaw's experts testified to sanity at the present time and swore that when Stanford White was killed the prisoner did not know the nature of his act. Fine distinctions from hearsay evidence!

District Attorney Jérôme presented experts who testified diametrically opposite; and it must be said after a careful review of the evidence that the latter gentlemen were in better position than their learned opponents. The entire case from the Thaw side savored, from the very beginning, of a too fond reliance on the power of money and its ability to purchase what was needed, even brains. The declaration of the suddenly rich financier who decried college education for his sons, saying they didn't need brains, he had money enough to buy all they needed, appears to have been engirdled with truth by this trial's incidents. The logical outcome of this would appear to be the appointment by the court of a commission of experts, medical and legal, whose opinions would be at the service of each side; a commission which should be impartially at the disposal of the court, and made up of men of unquestioned integrity. The expense should be borne by the state and the pay should be sufficient.

Viewed dispassionately, the attitude of District Attorney Jerome must commend itself to all who are not slushily inclined to wallow in incubated sentiment over the alleged wrongs of a poor chorus girl and the mock heroic defense of a selfish, self-centered and perverted mind. The real issue which the district attorney sought always to hold before the jury was that a

murder had been committed; that the man who did the killing was guilty of murder and should be punished. If sane, then let him follow the route taken by other murderers who have been convicted. If insane, then the proper place for him was an asylum for the criminal insane. That was Jerome's attitude and it cannot but commend itself to all serious minded people whether they be lay or professional men. Jerome's honesty of purpose, in spite of the fact that it has been called a trick, by those who bow before the shrine of the unwritten law, and many of them do that just because it looks well, and makes a noise in argument, is best shown by his demand for a commission in lunacy. Jerome believes that Thaw is of that type which is dangerous to society. There is much in the evidence to prove this to be so and the fact that eight jurors voted for conviction of murder in the first degree is significant, as are the facts that not one juror paid much attention to the expert testimony or believed the brilliant and pathetic tale of sexual assault recited by Evelyn Nesbit Thaw on the witness stand; the tale of her drugging and her vividly described rape. Surely, no one who has paid any serious attention to the study of sex and crime could think otherwise than that she had been carefully schooled in the recital of that wcesome story: so full of probability and realism and yet so sadly lacking in the essentials which would have made it believable, the essentials which are at once sought by the student of sex.

Thaw will be tried again and the case will be tried on its merits as a case of murder without brain storms or other confusing elements, it is hoped. Stanford White was shot. Harry Thaw shot him. Murder is excusable in self-defense in its broadest sense. White was shot in the back. The excuse was that at a time when his murderer did not even know the girl, he had raped by force, the girl whom Thaw afterward made his wife after dragging her through the slums of Europe as his mistress. The elements of self-defense are lacking; the home-defense is lacking, and apparently the case assumes the qualities which Jerome ascribed to it in his summing up—a vulgar Tenderloin murder.

To which might be added that its basis is sexual perversion.

For a New University.

VICE-CHANCELLOR CHARLES P. NORTON, of the University of Buffalo, and a member of the committee in charge of the university extension movement, appeared before the almshouse committee of the board of supervisors on April 12, and made a formal offer to exchange a farm of between 500 and 700 acres

for the county property on Main street at the city line on which stand the almshouse and the county hospital.

The committee listened to Mr. Norton's address with considerable interest as it dawned on them that this was the first definite public step toward the establishment of a university liberal arts department. While there has not been any reply made with regard to the exchange so far as relates to location of the farm offered, the supervisor's committee has been given the choice of several farms of the required size on which the university authorities have options.

The plan is that as soon as the county property at the city line is secured as a site for the new university, application will be made to the Rockefeller fund trustees, with every prospect that such an application for endowment will be successful.

As to Drinking Water.

WITH the present condition of the water supply in Buffalo, it is important to consider how to avoid infection. In other words, in the first place, how may the tap water be purified? and, in the second place, what is the purest and best water to substitute for the Niagara river water? The larger proportion of the population must, of necessity, drink from the hydrant water. For them the filter and teakettle are available, and properly used, afford as much protection as it is possible to obtain; but they must be used conjointly to bring complete success. If whenever it is impossible to boil and filter both, then all drinking water must be boiled. This dictate has been presented so often to the public through the newspapers and health department bulletins, that it would seem as if there were small need to repeat it here, but it also seems that we are prone to forget even the simplest rules of life unless we are reminded of them often, and sometimes by that saddest of all events,—death from preventable infectious disease.

Spring water has had a reputation for purity from an early day, but this traditional purity of the spring no longer is entitled to credit, because every well informed person knows that the source of the spring often becomes contaminated, and that it, also, is often insufficiently guarded from infectious germs, even in exceptional cases, perhaps, neglected altogether. So, if we not only would expect but insist upon absolute purity we must reject spring water, no matter how much its qualities in this respects are exploited nor how assertively advertised.

There is yet, however, left to us at least one source of water surely absolutely free from disease germs. We refer to water obtained by double distillation—a process which no pathogenic

bacteria or in fact any other vegetable microorganisms can withstand or outlive. As an example of this water we may mention the products of the Hudor Company, of Buffalo, which is in fact the ideal drinking water of the present day. This company, it may be proper to mention, has introduced recently a new process of distillation whereby perfection as nearly as possible is obtained. The water as now prepared is "ozonized" as well as distilled, hence possesses an increased value for drinking purposes. This water is commended to physicians who can prescribe it with confidence; to the laity who are able to buy any water in the market it may be said to be the *sine qua non* of potable waters for domestic use.

The Apollinaris water, of course, cannot be surpassed as a carbonated water, and will continue to hold sway as the "queen of table waters." We have treated the subject of drinking water at this time only in a very general way, but expect to return to it in the early future to discuss it more in detail.

SOME manufacturers of foods and medicines have incurred the displeasure of the Secretary of Agriculture, by representing to the public by advertisements that their products are guaranteed as to purity by the government of the United States.

Secretary Wilson is reported to have said that "if this outrageous misrepresentation does not cease the department will publish a list bearing the names of manufacturers who are indulging in this campaign of deception."

The secretary in an interview declared that the serial number and guarantee required by the pure food and drug act to be placed on food and drug products were being used by these manufacturers for this purpose.

"The serial number," said Secretary Wilson, "is assigned to fix the responsibility where it belongs—upon the manufacturer—and to protect innocent dealers. It is the guarantee of the manufacturer, not the guarantee of the government."

The secretary declared that every effort would be made by the department to stop these statements.

"I will do a little advertising myself," he said, "in behalf of the people. I am growing tired of seeing these untruthful statements on the advertising pages of the magazines, the walls of the New York subway and the advertising space of the street cars of the principal cities.

"Manufacturers who will deceive the public about the guarantee will lie about the quality of their products."

He added that the law was to be administered fairly and that no honest manufacturer need fear that the department will take snap judgment on him or harass him in any way.

WITH the March issue of the Medical Mirror that journal as an independent publication ceased to exist, having been absorbed by the Medical Era of St. Louis. The Mirror will be best remembered as edited for a number of years by the late Dr. I. N. Love.

PERSONAL.

DR. WILLIAM A. EVANS, of Chicago, has been appointed health commissioner of that city by Mayor Busse, who defeated Judge Dunne at the last election. Dr. Evans is one of the most prominent men in his profession in Chicago and, like Dr. Wende, health commissioner of Buffalo, will conduct a sanitary campaign on scientific principles and on energetic fearless lines.

DR. CHARLES A. ELLIS, of Sherman, N. Y., has sold his real estate and transferred his business interests to Dr. James L. Watt, of New York. Dr. Ellis will take a much needed rest after years of professional activity.

DR. ALMON H. COOKE, of Buffalo, announces his removal May 1, 1907, from 410 to 411 Ashland Avenue. Hours: until 9:30 a. m.; 1 to 3 and 7 to 8 p. m.

DR. E. S. MCKEE of Cincinnati, on account of his recent medico-legal writings has been made a member of the Medico-Legal Society of New York and one of the editors of the New York Medico-Legal Journal.

OBITUARY.

DR. WILLIAM R. CAMPBELL, of Niagara Falls, died at his home in that city April 9, 1907, of cancer of the liver, aged 53 years. He was a native of New York State, his family residing at Trumansburg for many years. He graduated in medicine at the University of Buffalo in 1880, and immediately thereafter began practice at Niagara Falls, being associated for many years with the late Dr. Gardner C. Clarke. He was one of the most prominent physicians in the city of his residence and was likewise interested in many business enterprises.

Dr. Campbell was the reigning president at the time of his death of the Alumni Association of the medical department of the University of Buffalo; he was also a member of the various local medical societies and was a medical officer in the National Guard holding the rank of captain.

He is survived by his wife, four sisters, Mrs. I. M. Peck and Mrs. Warren Peirson of Trumansburg, N. Y., Mrs. Frederick Trumbell of Ithaca and Miss Maud Campbell of this city, and three brothers, Daniel W. Campbell of this city, Dr. Alexander J. Campbell of Syracuse and James Campbell of Trumansburg, N. Y.

MR. THEODORE D. BUHL, President of Parke, Davis & Company, Detroit, died suddenly in New York, April 7, 1907.

The Board of Directors of Parke, Davis & Co., on behalf of the stockholders, employees, and executors, in special session to take action on the death of the president of the company adopted this memorial:

Ten and a half years ago Theodore D. Buhl cast in his lot with this house. Throughout that period he has given us the benefit of his large experience, his sound judgment, his great power in the commercial world, his granite credit reared on an unwavering honesty. As president of the house he was the perfect type of integrity and fidelity to all the stockholders. His high sense of duty as a trustee pledged to administer the property and guard the interests of others, was ever uppermost in his thoughts. The peculiar responsibilities and hazards of our work—our obligations as purveyors to the medical profession and to suffering humanity, were to him always a solemn appeal. The ultimate triumph of character in business was with him a conviction as deep and strong as instinct. The remote future and the distant prize concerned him more than the present gain.

The strength which he gave this house and all the many enterprises in which he shared, signally exhibits what the world should realise especially at this hour—that rich men of unflinching honesty and sound judgment are of inestimable value to their communities. They are the employers of labor, the authors of new industries, the creators of new values, the pioneers who open up vast avenues of opportunity for their followers. As they succeed or fail, the comfort, the very bread, of thousands is assured or endangered. We hear much these days of unscrupulous, predaceous wealth, but what of the type of Theodore Buhl—what of the men who consider the trust of their fellowmen the best of their possessions, who have a horror of stock-jobbing methods, who never seek an unfair advantage, who never lend their names to a dubious enterprise?

As a director Mr. Buhl was the soul of courtesy, kindness and deference. As an employer he was considerate, thoughtful, mindful of the comfort, interests and claims of his employees. To their grievances he gave always a patient and attentive ear. He encouraged the manly expression of honest opinion, and

when it differed from his own his effort was to convince and persuade, not to invoke his authority or impose his will.

On behalf of the stockholders, employes and executives of Parke, Davis & Company we record this testimony to the lasting service rendered us by our lamented president. To the members of the bereaved family we offer our warm and heartfelt sympathy. May strength be theirs to bear their sorrow. May they find much comfort in the memory of a life rich in well-doing and in good repute.

DR. JOHN H. WIGGINS, of Jamestown, N. Y., died at his home in that city April 1, 1907, aged 53 years. He graduated in medicine at the University of Buffalo in 1879.

DR. REED BROCKWAY BONTECOU, of Troy, N. Y., died at his home in that city March 28, 1907, after an illness of one week, aged 82 years. He graduated in medicine at the Castleton Medical College, Vt., in 1847. He was one of the noted field surgeons during the civil war: was in charge of the Haverwood United States General Hospital, Washington, from 1863 until its discontinuance in 1866; and was breveted lieutenant-colonel and colonel of volunteers in 1865, for faithful and meritorious service during the war. Dr. Bontecou was a frequent contributor to medical literature, especially in the line of military surgery; was a member of the American Medical Association and delegate to the International Medical Congresses of 1887 and 1890. At the time of his death he held, with other positions, that of surgeon to the Marshall Sanitarium, Troy.

SOCIETY MEETINGS.

THE eighth meeting of the Society of Clinical Surgery was held at Buffalo and Cleveland on April 19 and 20, 1907. Of the 40 members of the society thirty were present at Buffalo. The program for the meeting was as follows:

BUFFALO, FRIDAY, APRIL 19

Local Committee, DR. ROSWELL PARK

The Iroquois Hotel, headquarters for the meeting.

9.30 A.M.—Buffalo General Hospital, Surgical Amphitheatre.—Dr. Roswell Park and Colleagues (by invitation): Demonstrations of Cases, and Operations. 1 P.M.—Luncheon at the University Club (by invitation of Dr. Park). 2 P.M.—State Cancer Laboratory.—Drs. Gaylord and Cowles (by invitation): Demonstration of recent work in the investigation of Can-

cer. 3 P.M.—University Medical School.—Dr. H. W. Williams (by invitation) and Dr. F. C. Busch (by invitation): Demonstration of recent experimental work on the artificial passage of Gallstones with Infection of the Duodenum. 3.30 P.M.—Dr. F. C. Busch (by invitation): Transplantation of the Adrenals. 4 P.M.—Dr. J. A. Gibson (by invitation): Exhibition of specimens showing abnormalities and anomalies in the Sphenoidal Sinus. Dr. Park exhibited a series of pictures illustrating medicine and surgery in classic art, and in caricature. 7 P.M.—Dinner and business meeting at the Buffalo Club.

CLEVELAND, SATURDAY, APRIL 20

Local Committee, DR. G. W. CRILE

9 A.M.—Lakeside Hospital, Surgical Amphitheatre.—Dr. George W. Crile, Dr. Dudley P. Allen (by invitation), Dr. F. E. Bunts (by invitation), Dr. C. E. Briggs (by invitation), Dr. Hunter Robb (by invitation), and Dr. Henry A. Becker (by invitation): Clinical problems, illustrated by cases and operations.—Luncheon at Lakeside Hospital. 1.30 P.M.—Western Reserve Medical College.—Dr. C. A. Hamann (by invitation): Demonstrations in Surgical Anatomy of the Veins of the Neck, and Pathological Specimens. Dr. Torald Sollman (by invitation): Pharmacological Demonstrations. Dr. J. J. R. MacLeod (by invitation): Physiological Demonstrations. Dr. W. E. Lower (by invitation): On the Control of Hemorrhage in Operations on the Kidney. Dr. G. W. Crile and Dr. Hitchings (by invitation): The Technique of Direct Transfusion of Blood. Dr. G. W. Crile and Drs. Haskins, Folin, Cole (by invitation): Determinations of the Metabolism in Transfused (a) Dogs, (b) Human subjects. Dr. G. W. Crile and Dr. Dooley (by invitation): The Phenomena and Treatment of Acute Hemorrhage. Dr. G. W. Crile and Drs. Lenhart, Hitchings, and Eisenbrey (by invitation): Can a Differential Diagnosis between a Progressive Hemorrhage and Shock be made by Blood Examinations? Dr. G. W. Crile and Dr. Dolley (by invitation): (a) Strychnine Poisoning; Diphtheria Toxemia. Dr. G. W. Crile and Dr. Lenhart (by invitation): (b) Illuminating-gas Poisoning. Dr. G. W. Crile and Dr. Cole (by invitation): (c) In Uremia. Dr. G. W. Crile and Drs. Dolley, Lenhart, and Cole (by invitation): Transfusion in Surgical Shock. Dr. G. W. Crile and Drs. Dolley, Lenhart, and Cole (by invitation): Further Studies in Resuscitation and Brain Anemia.

THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES will hold its annual meeting at the Hotel Raleigh, Washington, D. C., Monday,

May 6, 1907, beginning at 10 a. m. Dr. George M. Kober, of Washington, is the president. Dr. Eli H. Long, of Buffalo, will open the discussion on Teaching Materia Medica, Pharmacology and Therapeutics, a paper to be presented by Dr. Torald Sollman, of Cleveland.

THE BUFFALO ACADEMY OF MEDICINE held meetings during the month of April as follows:

Section on Surgery.—Tuesday evening, April 2, program:

(a) Typhoid perforation, John Parmenter; (b) Intestinal obstruction, Marshall Clinton.

Section on Medicine.—Tuesday evening, April 9, Program:

A consideration of some of the physical signs in the chest of infants and children, S. McC. HAMILL, Philadelphia, discussion was opened by Irving M. Snow.

Postponement of Meeting.—The meeting of the section of Pathology announced in the program for Tuesday evening, April 16, was postponed until Tuesday, April 30.

Section on Obstetrics and Gynecology.—Tuesday evening, April 23, Program: (a) Delayed lactation, George A. Himmelsbach. (b) Conservative operations on the tubes, Edward C. Mann.

THE American Medical Editors' Association will hold its annual meeting at Atlantic City on Saturday, June 1, and Monday June 3, 1907, with headquarters at the Marlborough-Blenheim Hotel. James Evelyn Pilcher, is the president, who will deliver an address on "The future of Medical Journalism." Joseph MacDonald, Jr., New York, is the secretary.

THE Western New York Homeopathic Medical Society, at its twenty-third annual session held at Rochester, April 12 and 13, 1907, elected the following named officers: president, W. H. Doane, Rochester; first vice-president, Frank B. Seitz, Buffalo; second vice-president, Joseph Rieger, Dunkirk; secretary-treasurer, Clayton W. Seamon, Buffalo; censors, W. Louis Wilson, Niagara Falls, Warren C. Day, Rochester, William A. Keegan, Rochester, George S. Price, Fairport, John W. Baker, Batavia.

THE regular meeting of The Medical Society of the County of Erie was held Monday, April 8, 1907, at 8.45 P.M., under the presidency of Dr. A. H. Briggs, of Buffalo. The following papers were presented: The need of a trained microscopist in every community, William C. Krauss; Gun-shot wounds of the body, Vertner Kennerson; The physician in the wild and wooley west, George E. Fell.

THE NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS will hold its seventeenth annual meeting at Atlantic City on Tuesday, June 4, 1907. The place at which the meeting will be held will be announced in due season. A varied and interesting program is being prepared. Dr. Murray Galt Motter, of Washington, D. C., is the secretary.

THE THIRTY-SECOND MEETING OF THE AMERICAN ACADEMY OF MEDICINE (Specialising in Medical Sociology) will be held at the Hotel Dennis, Atlantic City, on Saturday, June 1, and Monday, June 3, 1907, under the presidency of Dr. Casey A. Wood, of Chicago.

THE AMERICAN CLIMATOLOGICAL ASSOCIATION will hold its twenty-fourth annual meeting at the Willard, Washington, D. C., May 7-9, 1907, under the presidency of Dr. Thomas Darlington, president of the board of health of New York city.

COLLEGE AND HOSPITAL NOTES.

THE medical building of McGill University, Montreal, was practically destroyed by fire April 16, 1907. The museum, one of the best on the continent, was also destroyed, but the valuable medical library was saved. This was the second disastrous fire within two weeks, the former resulting in the loss of the McDonald engineering building. The destruction of these buildings is a distinct loss to medical science and to the Dominion of Canada.

DR. T. O. MAXWELL, formerly superintendent of the Southwestern Insane Asylum at San Antonio, Texas, and for sixteen years first assistant physician to the State Insane Asylum at Austin, Texas, has purchased an interest in the Texas Sanitarium for Tuberculosis, Llano, Texas, and has been elected medical director of that institution, taking active charge of same.

BOOKS AND AUTHORS.

Textbook of Psychiatry. A Psychological Study of Insanity for Practitioners and Students. By **E. Mendel**, M.D., A. O. Professor in the University of Berlin. Authorised translation. Edited and enlarged by **William C. Krauss**, M.D., Buffalo, N. Y., President Board of Managers Buffalo State Hospital for Insane; Medical Superintendent Providence Retreat for Insane; Neurologist to Buffalo General, Erie County, German, Emergency Hospitals, etc.; Member of the American Neurological Association. 311 pages. Crown Octavo. Philadelphia: F. A. Davis Company. (Price, Extra Cloth, \$2.00 net).

Professor Mendel has been identified so prominently with the teaching of psychiatry in Germany for the past thirty years, that

a textbook which contains the result of his studies is a welcome addition to medical literature. No psychiatrist from America has ever visited Professor Mendel's clinic without coming away impressed by his scientific method and great attainment in this subject. This work is eminently the result of clinical observation. It abounds in notes which illustrate the various types of insanity. His classification of insanity into mania, melancholia, circular psychoses, acute dementia, epileptic psychoses, hysterical psychoses, choreic psychoses, intoxicant's psychoses, psychoses due to functional disturbances of the thyroid gland, psychoses of infection, psychoses from autointoxication, psychoses from organic poisons, psychoses from inorganic poisons, organic psychoses due to diseases of the brain cortex, cerebral dementia, arteriosclerotic psychoses, syphilitic psychoses, psychoses after apoplectic attacks, psychoses from brain tumors, and psychoses from trauma, is clear and reasonable as the author shows, and it will if followed enable the physician to make the diagnosis in a great majority of cases.

In studying this work we note that great attention is paid to the study and classification of hallucinations, delusions, disturbances of the feeling of judgment, disturbances of consciousness, such as stupor and mania. There is a series of plates illustrating the various stigmata of degeneration, which consider the configuration of the scalp, all deformities of the ear, the description of the eye, all degenerations and deformities of the palate, and abnormalities of the teeth. The directions for the examination of patients for the purpose of making a diagnosis in the supplement, are very complete, and if followed, the beginner can hardly fail to reach a decision as to the form of the disease.

Dr. Krauss is to be congratulated upon his translation, which has placed before American readers so perfectly this important work in psychiatry. Dr. Krauss's enlargement on the chapters of degeneracy and heredity have added materially to the value of the book. We speak for it a wide reading.

J. W. P.

Organic and Functional Nervous Diseases. By M. Allen Starr, M.D., Ph.D., LL.D., Professor of Neurology in the College of Physicians and Surgeons, New York; ex-President of the American Neurological Association and of the New York Neurological Society; Corresponding Member of the Societe de Neurologie de Paris; etc. Octavo, 824 pages with 284 engravings and 26 full-page plates in colors and monochrome. Philadelphia: F. A. Davis Company. (Price, Cloth, \$6.00, net; leather, \$7.00, net.)

The first edition of Dr. Starr's book met with such favorable recognition from the medical profession as to exhaust the supply within a year. This new book is marked by a careful revision of the first on organic nervous diseases, and adds a new section covering functional nervous diseases. The work is really the analytical study of Dr. Starr's large hospital and private practice, and this book gives the author's views and emphasises his per-

sonal observation and experience in the presentation of each subject. While he does not neglect reference to the views and theories of other authors, still very little is noted in this book which does not harmonise with his views.

Dr. Starr has seen fit to exclude many diseases which most authors include in their works on diseases of the nervous system,—notably, hydrophobia, trophic disorders such as lipomatosis, megaloccephaly, scleroderma, and trophoderma, so that many will be disappointed in not obtaining the author's views on these diseases. We agree with him that as works upon general medicine now include a complete description of these subjects, it is unnecessary to deal with them in a treatise like this.

A study of this book leads us to note the author's exact methods in diagnosis, and his marked advocacy of the surgical treatment of many of the nervous affections. There is no book on the subject which has appeared of late years that deals more directly with the treatment, surgical and medical, of nervous diseases than Dr. Starr's. It is beautifully printed and illustrated. We cordially recommend it to students of this specialty as one of the best of modern neurological works.

J. W. P.

Report of the Commissioner of Education for the year ending June 30, 1904. In two volumes. Washington: Government Printing Office. 1906.

The two volumes comprising this report present an exhibit of the educational status throughout the world for the year ending June 30, 1904. It shows that in the United States the number enrolled in schools and colleges, public and private was 17,896,890, an increase over the previous year of 357,422 pupils. It will be observed that the school enrollment comprises about one-fifth of the total population of the United States. The number in attendance upon special schools, public and private, in addition to the enrollment in the schools and colleges above mentioned, is 693,101. Adding this number to the aggregate in attendance on the schools and colleges (17,896,890) gives general education in this country a grand aggregate of 18,589,991. This splendid showing has not been equalled by any other country in the world. The report contains, *inter alia*, an account of education at the Louisiana Purchase Exposition, including an address on the lessons of the exposition by Dr. Howard J. Rogers, first assistant Commissioner of Education, state of New York, chief of the department of education and director of the congresses of the exposition; an interesting account of "The battle against alcohol," the latter being from the French of F. Dupré La Tour; temperance instruction in public schools, as well as many other instructive papers and reports.

All in all it is one of the most interesting and valuable of the recent reports of the department of education.

The Technic of Operations upon the Intestines and Stomach. By **Alfred H. Gould**, M.D., Boston, Massachusetts. Octavo volume, containing 190 original illustrations, some in colors. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$5.00 net; half morocco, \$6.00 net).

The technic elaborated in this book is the result of experimental studies on animals, mainly dogs, the work being repeated on the cadaver for anatomical corrections. These studies, which are most beautifully illustrated throughout the text, embrace three years of research work, and describe both in text and illustration, certain standard operations on the stomach and intestines with artistic and scientific exactitude. It is a book worthy the author and publishers; it supplies the operator with the information regarding technic that he may stand in need of at a critical moment; and, moreover, occupies a field heretofore practically vacant. It is a pleasure to possess such a book. It is in strong contrast to many books sent out that are of little or no value to medicine or surgery. This is a contribution to surgical literature that will endure, and no surgeon will permit himself to be long without it. We miss in the index of names that of Davis. It is well known to every informed surgeon that the Davis'—John D. S.—and William E. B.—were among the pioneers in the study of intestinal anastomosis in this country. Their contributions to the literature are too well understood and appreciated to make this omission of special significance.

Transactions of the American Surgical Association. Vol. 24. Edited by **Richard H. Harte**, M.D., Recorder of the Association. Philadelphia: William J. Dornan, Printer.

The transactions of this great surgical organisation, always interesting, are unusually so in this instance. Dr. VanderVeer's presidential address on the duality of malignant manifestations, carcinoma and sarcoma in the same individual is an interesting clinical contribution to this important subject. The cases he reports point directly toward the existence of this curious exhibition of cancerous lesions. A further attraction is Professor Trendelenburg's illustrated paper on the surgical treatment of epispadias and ectopy of the bladder. The paper by Mr. Charles A. Ballance, of London, in which he gave some experiences in intracranial surgery is still another valuable contribution to that very important topic and adds to the instructiveness of the volume. Mr. Hamilton A. Ballance, of Norwich, Eng., reported a case of traumatic hemorrhage into the left lateral lobe of the cerebellum treated by operation with recovery, which still again serves to make a group of attractive foreign papers.

The volume is full of interest, containing many other papers of value by the members, but we must content ourselves with mentioning these few, because lack of time and space forbid a general review of this excellent book.

The Medical Directory of New York, New Jersey and Connecticut.

Published by the Medical Society of the State of New York.
Volume VIII. Edited by **Wisner R. Townsend, M.D.**, secretary,
1906.

In accordance with a resolution passed by the house of delegates May 19, 1906, only registered physicians in the State of New York are included in this directory. In New Jersey and Connecticut, of course, this rule does not apply. Since the union of the association and society the directory heretofore published by the Medical Society of the County of New York has been discontinued.

This issue contains the names of 15,531 physicians, 11,976 of whom reside in the state of New York, 2,276 in the state of New Jersey, and 1,279 in the state of Connecticut. Of the number given as residing in the state of New York 4,293 belong in Manhattan and the Bronx, 1,559 reside in Brooklyn, 124 in Queens, and 58 to Richmond—a total for the municipality of Greater New York of 6,034. The number, therefore, residing in the remainder of the state is 5,942. This issue follows the handsome lines of its predecessors.

Studies in the Psychology of Sex—Erotic Symbolism, The Mechanism of Detumescence, The Psychic State of Pregnancy. By **Havelock Ellis**. Vol. 5. Pages x-285. Sold only by subscription to physicians, lawyers, and scientists. F. A. Davis Company, Philadelphia. (\$2.00 net).

This last volume of these studies is the most scientific, in some respects, of any of the series. Especially is this the case of the section on the mechanism of detumescence wherein the phenomena of discharge of energy in conjugation, together with its associate psychic manifestations, is delineated with sufficient accuracy to meet the purpose of the author. He justly remarks that the consideration of this phase of his topic carries investigation into the fields both of anatomy and physiology. The author has met this condition with great skill, imparting useful information with delicacy of expression and at the same time omitting no important or essential fact. By a stretch of the imagination he makes "detumescence" stand for "orgasm", which is well, because this book goes to the audience for which it was written with greater propriety of expression.

A Textbook on the Practice of Gynecology. By **W. Easterly Ashton, M.D., LL.D.**, Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. Third edition. Octavo of 1096 pages, with 1057 original drawings. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$6.50 net; half morocco, \$7.50 net).

The practical character of Ashton's treatise is indicated by the fact that a third edition was needed within a year after its first publication. Alterations and changes have been made to meet the advances in methods, so that the book represents the present acquirements of gynecological science. We think it un-

necessary to enumerate these additions or changes but may express the opinion that, as at present constituted, it is one of the great works on gynecology. Its original illustrations constitute no unimportant part of its excellence and its author may well feel proud of his work which has cost time and a considerable money outlay.

A Textbook of Obstetrics. By **Barton Cooke Hirst**, M.D., Professor of Obstetrics in the University of Pennsylvania. Fifth edition. Octavo of 915 pages, with 753 illustrations, 39 in colors. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$5.00 net; half morocco, \$6.00 net).

Hirst has been recognised for some years as one of the leading authorities on obstetrics. His treatise, published first in November, 1898, and now in its fifth edition, has become a conceded authority and is listed as a textbook in the leading medical schools.

This edition has been carefully revised and represents the best line of teaching on this most important branch of medical science, especial attention being paid to puerperal infection and gestational toxemia. These are among the most important topics that engage the attention of obstetricians at the present day, hence deserve treatment at the hands of an experienced teacher like Hirst.

A Textbook of Pathology. By **Alfred Stengel**, M.D., Professor of Clinical Medicine in the University of Pennsylvania. Fifth revised edition. Octavo of 977 pages, with 399 text-illustrations, many in colors, and 7 full-page colored plates. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$5.00; half morocco, \$6.00, net prices).

So excellent a work as Stengel's needs little attention at the hands of a reviewer and it is merely necessary to call attention to the improvements which have been made in this, the fifth edition. A large part of the section dealing with general pathology has been reconstructed and it is now in most complete form. There is noticeable improvement in the chapters on inflammation and animal parasites. While the book as a whole has been increased in size its general character as a textbook for students has not been lost sight of and it is issued as the most perfect type of such a work which has yet appeared bearing this author's name.

The Immediate Care of the Injured. By **Albert S. S. Morrow**, M.D., Attending Surgeon to the Workhouse Hospital and to the New York City Home for the Aged and Infirm. Octavo of 340 pages, with 238 illustrations. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$2.50 net).

Among the semi-scientific books which are designed for the home or the factory office rather than for the medical man, this occupies a prominent place. The writer's idea has been to prepare a book which would be useful to the layman and he has been eminently successful. In addition it would serve excellently as a textbook for first aid classes. To this end simplicity of language

is a feature and technical terms have been used only where absolutely necessary. There is a large number of illustrations, many of them original. One of the chief charms of the book is its lucidity and its intelligence. It is not above the everyday reader and in this it is valuable.

The Practitioner's Medical Dictionary. An Illustrated Dictionary of Medicine and Allied Subjects by **George M. Gould**, A.M., M.D., Editor of "American Medicine." With 388 illustrations. Octavo; xvi-1043 pages. Philadelphia: P. Blakiston's Son & Co. (Flexible leather, gilt edges, rounded corners, \$5.00; with thumb index, \$6.00, net).

This edition of Gould's dictionary is an improvement over the volumes which have gone before, in that it has been brought accurately up to date. There is little on which to base honest criticism. The newest words find place in its pages and one of the features is the introduction of the terms of the Basle anatomic nomenclature. The book is excellently published; good paper, clear type, irreproachable letter press and splendid illustrations being special points. A very gratifying feature of the mechanical work is the method of binding which permits the book to lie flat open at any page.

Thornton's Pocket Medical Formulary. New (8th) edition, revised to accord with the new U. S. Pharmacopeia. Containing about 2,000 prescriptions with indications for their use. Lea Brothers & Co., Philadelphia and New York. 1907. (Leather, \$1.50 net).

So popular is Thornton's Formulary that it has gone into the eighth edition and the new volume just received shows radical improvement over its predecessors. The author has arranged diseases alphabetically and under each is given the best formulas for all the conditions which might arise. One of the chief values of the book is the rearrangement necessitated by the recent changes in the pharmacopeia. The importance of these changes is inestimable; even if the formulas are not made use of. The information contained in the book regarding the changes in strength and preparation of drugs, would make it almost invaluable for ready reference.

Manual of Artificial Limbs. Copiously illustrated. Octavo, pp. 430. A. A. Marks, 701 Broadway, New York.

The house of A. A. Marks is, doubtless, the most extensive as well as the most scientific manufacturer of artificial limbs within the borders of the United States; nor is it excelled in these respects anywhere in the civilised world.

This book is properly called a Manual; it is divided into chapters devoted to the several phases of the subject; and is properly illustrated, so that those seeking information can readily find it, no matter upon what special point it is desired. It will thus be easily understood that we are not dealing with a

catalogue of mechanical appliances, but a treatise upon artificial limbs. It would be difficult to find any form of amputation stump or deformity not mentioned. It is a book well worth examining.

A Textbook of Pharmacology. Including Therapeutics, Materia Medica, Pharmacy, Prescription-Writing, Toxicology, etc. By **Torald Sollmann**, M.D., Assistant Professor of Pharmacology and Materia Medica, Western Reserve University, Cleveland, Ohio. Second edition. Octavo of 1070 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$4.00; half-morocco \$5.00, net prices).

Activity in pharmacologic research since the publication of the first edition of this book has made necessary the issue of another volume which is practically a new work because a complete rewriting has been a necessity. The chapter on laboratory work has been recast entirely and now includes apparatus and technic. As an indication of the completeness of the volume there is a dose table for animals. There are many new illustrations.

Saunders's Hand-Atlases. Atlas and Epitome of Dentistry. By **Prof. Gustav Preiswerk**, of Basil. Edited, with additions, by **Geo. W. Warren**, M.D., Professor of Operative Dentistry at the Pennsylvania College of Dental Surgery. With 44 lithographic plates in colors, 152 text-illustrations, and 350 pages of text. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$3.50 net).

Dr. Warren has done an excellent bit of work in preparing this book for the Saunders series. Although it is a work on dentistry, it is nevertheless of rather more interest than such strictly technical works would be to the physician. The illustrations numbering 103 colored figures, 44 plates and over 150 text illustrations mark its chief value. The historical sketch of dentistry is intensely interesting and altogether the book is most complete.

A Manual of Pathology. By **Guthrie McConnell**, M.D., Pathologist to the St. Louis Skin and Cancer Hospital and to St. Luke's Hospital. 12mo of 523 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1906. (Flexible leather, \$2.50 net).

This manual was written and published with a distinctly stated object, that of enabling the student to rapidly acquire the salient points of the subject with which it deals and this object has been achieved in every sense. There is no small work, in the manual class, which is more carefully prepared or more excellently illustrated.

Manual of Clinical Chemistry, by **A. E. Austin**, M.D., Professor of Chemistry and Toxicology in the Medical Department of Tufts College, Boston. 12mo, pp. 278. Boston: D. C. Heath & Co. 1907. (Price, \$1.75).

Primarily this manual was intended for second year students, but it is so excellently arranged and so clear in its presentation of the elements of the subject that even first year students may

secure great benefit from its study. There are many points which stand out in the arrangement of the classification which make the book the peer of others in its class.

The Elements of the Science of Nutrition. By **Graham Lusk**, Ph.D., M.A., F.R.S. (Edin.), Professor of Physiology at the University and Bellevue Hospital Medical College, New York. Octavo of 326 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$2.50 net).

In compact form this book presents the question of dietetics in health and disease and bases it all upon sound scientific principles. For twenty years or more laboratory methods have been applied to hospital patients in Germany with a view to explaining the inner processes in disease. It is regrettable that the United States is far behind in this respect and that what we do know is based on foreign research largely. The book is one which may properly be classed as a valuable addition to the library, and its methods are well worth following up.

Materia Medica for Nurses. By **Emily M.-A. Stoney**, Superintendent of the Training School for Nurses at the Carney Hospital, South Boston, Mass. 12mo of 300 pages. Third edition, thoroughly revised. Philadelphia and London: W. B. Saunders Company, 1906. (Cloth, \$1.50 net).

This is an excellent book for the purpose for which it is written and its value and popularity are shown by the fact that three large editions have been found necessary in a short time. There is not a nurse practising her profession who cannot get valuable hints from its pages. It is explicit, intelligible and above all interesting. Its author has the faculty of placing the subject in a readable form. The part dealing with emergencies is absolutely invaluable to the nurse.

A Manual of Normal Histology and Organography. By **Charles Hill**, Ph.D., M.D., Assistant Professor of Histology and Embryology, Northwestern University Medical School, Chicago. 12mo volume of 463 pages, with 312 illustrations. Philadelphia and London: W. B. Saunders Company, 1906. (Flexible leather, \$2.00 net).

Written for elementary students this book places the subject before them in a new light and the fundamental facts are stated in as clear and concise a manner as possible. The illustrations are helpful. A valuable section is that on the oral cavity in which the structure and function of the teeth are fully discussed. Each subject is treated in a fundamental manner, but completely, if briefly.

Retinoscopy, in the Determination of Refraction at One Meter Distance with the Plane Mirror. By **James Thorington**, M.D., Author of "Refraction and How to Refract," etc. Fifth edition. pp. 67. With 54 illustrations. Philadelphia: P. Blakiston's Son & Co. 1906.

Revised and enlarged and improved in many ways this fifth edition is so unlike the previous issues of the work that it is al-

most unrecognisable. There are 54 illustrations in this edition many of which are in colors. A great deal of attention has been paid to the newer instruments including the electric retinoscope. This is a work which is well worth the time spent in studying it.

Saunders's Pocket Medical Formulary. By William M. Powell, M.D., author of "Essentials of Diseases of Children." Containing 1831 formulas from the best known authorities. With an appendix containing Posologic Tables, Formulas and Doses for Hypodermic Medication, Poisons and their Antidotes, Diameters of the Female Pelvis and Fetal Head, Obstetric Table, etc., etc. Eighth edition, adapted to the new (1905) Pharmacopeia. Philadelphia and London: W. B. Saunders Company, 1906. In flexible morocco, with side index, wallet and flap. (\$1.75 net).

The eighth edition of this handy little volume is well up to the high standard which marked the previous issues. It is brought up to date with the changes in the pharmacopeia and besides contains many new formulas.

Transactions of the twenty-eighth annual meeting of the American Laryngological Association held at Niagara Falls, N. Y., May 31, June 1 and 2, 1906. James E. Newcomb, M.D., secretary.

This book containing the papers read at the Niagara Falls meeting of the association last year, is replete with excellent material. It gives a fair exposition of the advanced status of laryngology, the contributions, for the most part, being of the higher order. It proves an addition to the literature of the subject, which everyone who practises the specialty will welcome.

A Syllabus of Materia Medica. Compiled by Warren Coleman, M.D., Professor of Clinical Medicine in Cornell University Medical College. Third edition. pp. 186. New York: William Wood & Co. 1906. (Price, \$1.00).

This is the third edition and has been entirely revised as necessitated by the changes in the U. S. P. The book has been entirely recast in all respects and is much superior to the preceding issues. A feature is the exclusion of all the unofficial drugs. The book is small, but it is a mine of compact information.

BOOKS RECEIVED.

The Nursling. The feeding and hygiene of premature and full-term infants. By Pierre Budin, Professor of Obstetrics, University of Paris; Director of the Clinique Tarnier. Authorised Translation by William J. Maloney, M. B., Ch. B., Fellow of the Obstetrical Society of Edinburgh, with an introduction by Sir Alexander R. Simpson, M.D., Emeritus Professor of Midwifery and Diseases of Women and Children, University of Edinburgh. Large 8 vo, pp. 223. With 111 diagrams in color and other illustrations. London: The Caxton Publishing Company. New York: Imperial Publishing Company. 1907. (Price, \$6.00.)

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery,

Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. Edited by W. T. Longcope, M.D. Volume 1, Seventeenth series. 1907. Philadelphia and London: J. B. Lippincott Co. (Cloth, \$2.00).

A Manual of Obstetrics. By A. F. A. King, M.D., Professor of Obstetrics and Diseases of Women in the Medical Department of the George Washington University, Washington, D. C., and in the Medical Department of the University of Vermont, etc. Tenth edition, enlarged and thoroughly revised. 12mo., 688 pages, with 30 illustrations and three colored plates. Lea Brothers & Co., Philadelphia and New York, 1907. (Cloth, \$2.75, net.)

The Technic of Modern Operations for Hernia. By Alexander Hugh Ferguson, M.B., M.D., Professor of Clinical Surgery, Medical Department of the University of Illinois; Professor of Surgery at the Chicago Post-Graduate Medical School. Royal octavo, pp. 336. Illustrated by reproductions of original drawings from the author's collection. Chicago: Cleveland Press. 1907. (Cloth \$4.00; half morocco \$5.00.)

Physical Diagnosis. With case examples of the Inductive Method. By Howard S. Anders, A.M., M.D., Professor of Physical Diagnosis in the Medico-Chirurgical College, Philadelphia. Octavo, pp. 475. With 88 illustrations in the text and 32 plates. New York and London: D. Appleton and Company. 1907. (Price, \$3.00.)

Essentials of Chemistry and Toxicology for the Use of Students in Medicine. By R. A. Witthaus, A.M., M.D., Professor of Chemistry, Physics and Toxicology in Cornell University. Thirteenth edition. Revised by R. J. E. Scott, author of "The State Board Examination Series." New York: William Wood and Company. 1907. (Price, \$1.00.)

Proceedings of the American Medical Editors' Association. Thirty-seventh annual meeting held in Boston, June 5, 1907. Joseph MacDonald Jr., M. D., Secretary.

ITEMS.

THE UNITED STATES CIVIL SERVICE COMMISSION announces an examination on June 13-14, 1907, to secure eligibles from which to make certification to fill at least five vacancies in the position of medical interne (male), at \$600 per annum each, with maintenance, in the Government Hospital for the Insane, Washington, D. C., and vacancies as they may occur in any branch of the service requiring similar qualifications. For information in detail address the United States Civil Service Commission, Washington, D. C.

MESSRS. BATTLE & Co., Saint Louis, have issued recently No. 1 of the series of eighteen illustrations of dislocations, which will be a complement to the series of long bone fractures. This pamphlet contains a chart showing bilateral dislocation of jaw, and will be sent free to physicians on application.

OCCUPATION DUSTS.—The American Institute of Social Service (*Mobile Med. & Surg. Jour.*) has received from Dr. Sommerfeld, a physician and scientist of Berlin, a valuable anti-tuberculosis exhibit for the department of industrial hygiene in its Museum of Security. There are 45 vials containing as many different kinds of dust, mineral, animal and vegetable, produced in our various industries. The same number of photographs show how these various dusts appear under the microscope. Extremely realistic models in wax, colored to life, represent human lungs as they are affected by occupational dusts, other models show normal lungs for comparison; while still others show the effects of industrial poisons on the system.

At the meeting of the Executive Committee of the American Institute of Social Service held in April at the Players' Club as the guests of Mr. Richard Watson Gilder, announcement was made that the Scientific American, through a desire to co-operate with the work of the Institute in promoting an American Museum of Safety Devices, would give annually a gold medal to be awarded by the Institute for the best device for preventing accidents.

An advisory committee of the editors of the great technical papers was organised to co-operate with the Institute in the work of protecting life and limb. As at present constituted the advisory committee consists of fourteen representatives from the Scientific American, Iron Age, American Machinist, Railway and Locomotive Engineering, Automobile, Electrical World, Street Railway Journal, Dry Goods Economist, Electrical Age, Railway Gazette, and Engineering and Mining Journal.

LEGISLATION FOR VITAL STATISTICS.—Cressy L. Wilbur, Washington, D. C., declares (*Texas Medical News*) that the condition of vital statistics in the United States is a reproach to the country. He states that the importance of vital statistics, both from a legal standpoint and for the purpose of effective sanitary administration, is altogether overlooked by us. He calls attention to the states in which registration has been enforced, and shows in tabular form the states which constituted the registration area in 1900 and those which have been added since. He refers to the work of the American Medical Association in this matter and quotes from the transactions of the association for 1848 to show that the accurate registration of vital statistics was one of the first objects which the association desired to promote. He takes up in detail the necessary provisions of a registration law for deaths and calls attention to the evils of non-enforcement of the law when one exists. The county system of attempting to collect vital statistics he terms pernicious. It has never yet, he declares, successfully collected them in a single state of the many in which it has been tried, and he considers it one of the stumbling blocks that are continually thwarting efforts to secure adequate legislation. He mentions the work of the Bureau of the Census and in a footnote enumerates some of its publications relating to this subject which are available.—*Journal A. M. A.*

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

JUNE, 1907.

No. 11

ORIGINAL COMMUNICATIONS.

Obstruction of the Bowel.

By MARSHALL CLINTON, M.D., Buffalo, N. Y.

IN meeting with cases of obstruction of the bowel the physician is always confronted with the question as to whether the condition is one depending upon some acute inflammatory process, or due to some mechanical obstruction, gradual or sudden in its onset. Stenosis of the intestine or gradual narrowing of the lumen of the intestine is of slow development. Among the common causes of stenosis of the intestine we find stricture as a result of cicatricial contraction, malignant disease or, more rarely, benign growths within the bowel and compression from without, as pressure by a tumor.

Irrespective of the development of the stenosis itself we find that the symptoms may develop very gradually or may occur suddenly when the patient is in apparent health. The primary cause of all the fundamental symptoms of narrowing of the lumen is interference with the onward passage of intestinal contents. As soon as the passage of bowel contents becomes difficult, so that the normal peristaltic wave is insufficient to force these contents through the point of constriction, symptoms appear. The severity of the symptoms and the time of their appearance will depend largely on the location of the stenosis, as we know that almost complete obstruction may exist in the small intestine before any symptoms are noticed, while slight narrowing of the lumen of the large intestine, particularly the latter half, will be followed by early symptoms.

In stenosis of the large intestine and rectum constipation is an early symptom; gradually this becomes more intractable and patients complain of a feeling of distention and swelling in the abdomen; then of loss of appetite and occasional attacks of nausea. One of the characteristic early symptoms of stenosis of the large intestine are these alternating attacks of constipation followed

by diarrhea. After a time, irrespective of the location of the stenosis, paroxysmal attacks of colic occur. The time in the development of stenosis that colic appears varies widely, as hypertrophy of the bowel wall above the stenosed area will delay the onset of this symptom. Many patients complain of colic as the first symptom. The colic may be localised or diffused over the abdomen and even the chest, the colic being frequently accompanied by vomiting.

In all cases during paroxysms of colic absolute constipation exists. If the abdomen of a patient with stenosis be examined during a paroxysm, tonic contraction of the intestine, above the stenosis, may be seen and felt. The picture present on inspection of the abdomen is typical of this condition—that is, coils of intestine stiff from tetanic contraction, which rise above the level of the abdomen. The attacks of colic may recur after a few days or not for many weeks. When stenosis is far advanced and the attacks recur with great frequency, the abdomen remains permanently distended and the patient suffers from dyspnea. As stenosis progresses, attacks of colic occur every day until ultimately the symptom picture of complete obstruction develops. In cases of stenosis there is frequently a feeling of fluctuation on palpation, and occasionally distinct succussion sounds can be produced, particularly in the intestine above the stenosis.

When loops become much distended and filled with fluid the percussion note in the abdominal flank may be dull, changing its level with change in position of the patient as seen frequently in ascites. However, this may be differentiated from ascites by making rapid taps against the dull area, which will reveal distinct succussion sounds. To attempt to differentiate clinically between the various forms of stenosis of the bowel, is too hard a problem to be readily mastered. We know, however, that irrespective of the cause of the stenosis this condition generally tends to result in complete occlusion. Given then any case in which we find the prominent symptoms as outlined, we are reasonably sure that unless that patient is relieved, there will ultimately result an occlusion or, as it is more commonly known, an acute intestinal obstruction.

Surgical experience and medical practice show no class of cases more to be dreaded than that of acute intestinal obstruction. The mortality under any method of treatment is alarmingly high. Surgical intervention in a developed case of intestinal obstruction is the best hope these patients have; and unless this be offered to them at an earlier period than happens commonly, our statistics will not improve. No accident as a post-operative complication, except peritonitis, is so feared as this.

In the majority of post-operative obstruction cases of course a localised or general peritonitis is the initial cause, and the subsequent obstruction is but a part of the symptom complex. This is shown in every case of peritonitis that goes progressively from bad to worse. It is undoubtedly extremely hard at times to differentiate between cases of post-operative intestinal obstruction due to peritonitis, and cases in which peritonitis develops secondarily to a mechanical obstruction.

In following post-mortem work it has often chanced that a patient has been thus examined, who died of a post-operative obstructive lesion with a secondary peritonitis, when the history of that particular case showed that the patient had been treated as one suffering from a spreading peritonitis and not as a case of intestinal obstruction. It is important to remember that in every case of intestinal obstruction the symptoms are not due simply to the interruption of the flow of intestinal contents through the bowel. Complications, such as circulatory disturbances in the intestinal wall and mesentery and alterations in functions of these structures, are in large measure responsible for the symptoms seen.

As soon as the occlusion of the bowel occurs the appetite is lost, and the patient begins to complain of nausea and belch gas. Nausea persists until vomiting finally occurs. At first the stomach contents are vomited mixed with bile, and then fecal vomiting occurs. Fecal vomiting is only absent in very acute and very rapidly fatal cases of strangulation of the bowel. In these cases death ensues before the formation of feculent bodies can occur in the upper intestinal tract. The act of retching and vomiting determines whether fecal vomiting occurs and not the antiperistaltic movement of the bowel; for cases may go on to fatal termination with the entire gastrointestinal tract filled with fecal material, while no fecal vomiting may have occurred.

As an illustration of excessive retrostalsis in a case of incomplete obstruction, with a spreading peritonitis, the writer has seen an olive oil enema vomited up several hours after its injection into the rectum. With the onset of early pain which is so often seen, an evacuation of the bowels may occur, associated with a great deal of tenesmus; all of the expelled material coming from the lower bowel, beyond the point of obstruction. This symptom is often misleading as naturally an obstruction of the bowel is not suspected when a bowel movement occurs. After this movement, however, nothing further passes the bowel as the result of either cathartics or enemata, unless it be a little fecal material mixed with the enema that has over-distended the rectum. No flatus or real feces from now on are passed; the

belly begins to distend, the distention depending upon the anatomic character of obstruction and its situation in the intestine.

At this time the most serious symptom may develop,—that of shock and collapse. The face of the patient becomes distorted with pain, and a frightened expression appears; extremities become cold and bluish; pulse becomes rapid, small and compressible. Gradually the gastrointestinal symptoms increase in severity and hiccough becomes violent; nausea becomes very distressing and fecal vomiting continues. In addition the patient suffers from an unquenchable thirst; the abdomen becomes more and more distended; respiration becomes more rapid and shallow, and the patient is tortured with a terrible feeling of oppression. The urinary secretion is partially or completely arrested; the patient becomes weaker and weaker, and the picture is rendered more distressing by the fact that the mental condition is almost unaffected, while experiencing great pain.

In the last stages the skin is sallow and flaccid, cool, livid, and frequently covered with a cold sweat. The eyes of the patient are sunken and surrounded by dark circles; the face looks pinched; the nose sharp and pointed; the voice weak, and the pulse feeble and threadlike.

In the early stage the degree of pain the patient suffers depends largely upon the extent of the involved intestine; the larger the amount of intestine involved in the process the greater the pain. In acute obstruction of the small intestine, as a rule, there is more pain than in obstruction of the larger gut. The pain and obstruction is constant, as in peritonitis; is increased by pressure, remits, and becomes exacerbated, due to violent peristaltic movement above the point of obstruction. When pain ceases without relief of the obstruction it indicates a fatal ending.

One symptom that varies greatly in different parts is the increase in intraabdominal pressure. This occurs as a result of the distention of the gut, and as a result of the reflex action of the abdominal and diaphragmatic muscles. This increased pressure causes an embarrassed heart action, and also what is an extremely important matter, it may prevent the intestines from regaining their normal position, by reason of peristaltic pull. It favors the development of new areas of stasis so that a compromised bowel will be held as if in a vise, by this increased pressure. Some patients cannot recover after an obstruction is relieved surgically; this being the case particularly when there is a tremendous increase of abdominal pressure, unless this, in turn, be relieved by an enterostomy or colostomy.

In differentiating between the stenosis that occurs in normal or healthy gut and that which occurs as the result of a gradual

narrowing of the intestinal lumen, it should be remembered that in chronic stenosis we see the wave-like movement of energetic, resistant intestine against the belly wall; while in acute obstruction the abdominal wall will be tense, resistant, and rarely shows any intestinal movement. In intestinal strangulation the intestinal and peritoneal branches of the pneumogastric and the sympathetic are first stimulated. Irritation of these fibers leads to alteration of the heart's action and, by causing reflex paralysis of the cardiac branches of the pneumogastric and the splanchnic nerves, further produces alterations in the general distribution of the blood throughout the general circulation. When reflex paralysis of the splanchnics occurs there will be an enormous distention of the abdominal organs with blood. The temperature of the skin and the rectum is lowered until peritonitis ensues. This latter condition occurs by reason of the passage of bacteria through the wall of the intestine as soon as the bowel wall becomes edematous, or there is any interference with the local circulation.

The prognosis of acute intestinal obstruction depends on a variety of factors aside from the time it may be operated upon for relief. As a general rule, we may say that the life of these patients is not threatened so much by the interference with the onward passage of the feces and the intestinal occlusion, as by the symptom of collapse. Here is the key to the surgical prognosis of any operated case. If there is marked collapse and great increase in abdominal rigidity the patient's chances are extremely small, even if the condition has existed but a short time. On the other hand, patients may have an intestinal obstruction of several days and yet recover with operation. The most interesting although the most rapidly fatal case of acute obstruction that has come under the writer's notice occurred last August.

A young man, 26 years old, was seized with cramps in the afternoon about 2 o'clock. His condition did not improve under anodynes or enemas so about midnight he walked from his bed into an automobile, and was driven 22 miles to the hospital. He was seen by me at 4:30 A.M., after his arrival at the hospital and I found him in a state of collapse—no radial pulse; nausea, and vomiting; no abdominal rigidity, although there was slight distention and some pain on pressure. His condition did not warrant anything being done except hot packs, with small repeated doses of morphine and stimulants. His collapse did not let up for an instant and he died before noon. Total duration of illness, less than 24 hours. An immediate post-mortem showed an intussusception with over two feet of strangulated ileum in the cecum. There was no peritonitis whatever, except in the peritoneum lining the invaginated intestine. This represents one

of those cases of early death from collapse. The other two causes of death are usually peritonitis or exhaustion.

As an illustration of exhaustion without peritonitis or collapse as a cause of death I might mention a case of complete stenosis of the sigmoid, occurring as a sequel to a carcinoma of the gut where the patient, for a period of six weeks, did not pass a bubble of flatus or a particle of fecal material by his rectum, and finally died from exhaustion with an empty intestinal tract that had been cleaned out by retrostalsis, assisted by daily abdominal massage.

In the report of the following cases only those that are post-operative are included. No case of intestinal obstruction that had not been previously operated for some abdominal lesion is included. No case is reported where an obstruction was suspected and a general peritonitis found. The cases are as follows:

Case 1. Aug.—1904. Italian, 26 years old, male. Had had several attacks of appendicitis, and was convalescing from such an attack on admittance to the Erie County hospital. At the operation a dense mass of old and recent adhesions were met with and a large, thick appendix removed. Portion of the ileum at the ileocecal valve and the wall of the cecum were denuded of peritoneum. He did well after the operation and was over his vomiting from his anesthetic in 8 hours. In the evening of the following day he complained of cramp like pains, and began to vomit. There was some intestinal distention and slight tenderness of the abdomen, but a normal temperature. The house surgeon called up and said he had a case of post-operative obstruction. The patient was seen, the house surgeon complimented on making a brilliant diagnosis, and the patient operated about midnight. In delivering the cecum into the wound, the ileum was found flexed on itself, with recent delicate adhesions holding the angulation so firmly that no intestinal contents could be milked past the point of obstruction. Gently freeing the bowel permitted the contents to bubble past the affected point. He was closed up tight and made a rapid and uninterrupted recovery. This is the earliest case, being less than 48 hours from the time of the original operation.

Case 2. July—1904. Boy, 12 years old. Acute perforative appendicitis. Appendectomy and drainage on account of well marked peritonitis and abscess. Fourteen days after operation, the patient developed symptoms of acute obstruction, and an immediate operation was performed. A mass of adhesions was found matting the ileum together, and after these were freed the bowel returned and the patient was closed up without drainage. No gas or feces passed after this operation and as the parents refused to permit further surgical interference, he was

taken home where he died 5 days later. The operation had afforded him no relief.

Case 3. Italian, 38 years old, male, operated Dec. 28, 1904, by one of my colleagues for an acute appendicitis. The patient did not do very well after the operation and four days later he evidently had some peritonitis and a well marked obstruction. The writer was asked to operate on him and did so on the fourth day, finding a volvulus of a coil of small intestine in the right iliac fossa, bound down by recent adhesions and a well marked peritonitis. The obstruction was relieved and the case drained. He died four days later from peritonitis.

Case 4. L. E. Operated by a colleague early in Nov. 1905. Patient had considerable post-operative peritonitis, following an operation for recurrent appendicitis. The patient was left in my charge and developed pain and tenderness in the left iliac fossa, obstructive symptoms, and considerable collapse three weeks after the first operation. A diagnosis of obstruction was made, the belly opened in the left smilunaris and matted coils of ileum found through which nothing could be milked. Loosening up adhesions and freeing the coils was followed by re-establishment of the fecal current, and the abdomen was sewed up, with drainage. Recovery rapid and uneventful. In this case the collapse was the most marked feature.

Case 5. March—1904. Fred H. Admitted to the hospital with marked signs of general peritonitis, and marked collapse. Patient had been sick four days from appendicitis. Belly found full of pus and numerous abscesses with thin walls of masses of lymph. Patient drained on both sides of the abdomen, in both flanks, in the middle line, and sent to bed with the expectation that he would promptly die. Irrigation of the abdominal cavity with five gallons of hot salt solution was ordered every six hours, and patient placed in the elevated position. Forty-eight hours after this operation he had a radial pulse: and made a slow convalescence. Owing to the wide-spread peritonitis that had developed it was carefully explained to him that he might also develop an obstruction, and how it would affect him. He left the hospital and six months later arranged to return to work. That morning at 4 A.M., his brother called up on the telephone saying: "Freddy says he has got it, and wants you to send the ambulance for him right away." When he was seen at the hospital he located an obstruction at a point corresponding to McBurney's point on the left side. He was opened and I found a thick adhesion band lying across the small gut and obstructing it. Cutting this with scissors was followed by a bubble of intestinal contents, past the obstructed point, and after sewing him up he was sent to bed where he made an easy recovery.

Case 6. Feb—1906. This probably should not be included in this series as her obstruction had nothing to do with her

operation. A woman, Mrs. K., 43 years old, with chronic cholelithiasis was operated by removing one large gallstone and draining the gall-bladder. She had an enormous umbilical hernia as large as her own head, which she stipulated should not be touched during the operation on her gall-bladder. Just 14 days after her gallbladder operation she developed an obstruction in the hernial sac that could be easily seen with only the skin and sac covering the intestine. She was taken back to the operating room and a radical herniotomy done after Mayo's method. Her recovery was rapid and satisfactory and she is able for the first time in twenty years to wear a straight front corset.

Case 7. July—1906. V. N. child eight years old. Acute appendicitis. Sick five days. Abscess drained. Convalescence normal for an abscess case until the 11th day, when she developed obstructive symptoms referable to the left side. A small abscess was opened and drained on the left side, and a mass of adhesions forming an obstruction in the small gut found, her condition for 24 hours was very grave, but she gradually improved and soon was enjoying her holiday vacation.

Case 8. Aug. 8, 1906. Male inmate at the Erie County penitentiary. Patient had been operated (appendectomy) in Detroit eight months previous. Two months later operated at another hospital in Detroit for relief of obscure abdominal symptoms. Said the doctors told him his bowels had grown together and they couldn't do anything for him. Has had increasing difficulty, and cramps in trying to get his bowels to act. Has been completely obstructed for 48 hours. Large scar of an old appendix operation wound and a scar from the symphysis pubes to the umbilicus. Belly distended and flaccid. A generous incision along the border of the right rectus muscle revealed a dry tubercular peritonitis, with the intestines one large mass of adhesions and tubercles. After carefully separating the distended intestines from each other, a denser mass of tubercular tissue and coils of small intestine was found marking the point of obstruction. These were carefully separated but the intestine was torn into. The coil was followed up until the gut was entirely separated, and resection of about seven inches of ileum was made that was badly involved and torn. The appendix was found in the pelvis, riddled with tubercles and removed. The incision was sewn up without drainage; and the patient not only made a good recovery from the operation but on his discharge had regained his health.

Case 9. Jan., 1906. Miss S., aged 32. A late appendix case with a localised abscess and perforated appendix; drained and she made a slow recovery, with a fecal fistula. Five weeks after the operation developed symptoms of obstruction, with localised pain and tenderness in the upper right quadrant of the abdomen, with slight fever. This obstruction seemed to be associated with some inflammatory condition as a localised peritonitis and not

purely mechanical. The upper end of the appendix scar was extended upward and a coil of small intestine delivered into the wound lying around an abscess, the size of a hen's egg. The gut at this point was empty but distended above. Cleaning out the abscess cavity showed the mesentery not seriously involved so the gut was straightened out, the coil replaced, and a small drain left where it had lain. Her recovery was rapid.

In the analysis of these cases that have occurred in the writer's practice in the past three years we find two deaths. Cases two and three died, and the remaining seven recovered. This does not include any cases of intestinal obstruction, except those of a post-operative type. In other cases, such as obstruction from hernia, peritonitis with appendicitis, cancer of the intestine, etc., my records do not show any such favorable results. Only two of these operated cases show marked or even serious collapse at the time of intervention, to which the writer attributes largely the high percentage of recoveries. When collapse is marked, when there is a well marked secondary peritonitis, and tremendous increase in intraabdominal pressure, these cases are generally hopeless. It is only by a prompt recognition of existing conditions and their rapid surgical relief that a greater percentage of recoveries can be established.

516 FRANKLIN STREET.

Achylia Gastrica.¹

By I. H. LEVY, M.D., Syracuse, N. Y.

Associate Professor of Clinical Medicine, College of Medicine, Syracuse University
Physician to the Hospital of the Good Shepherd, Syracuse.

THE physician who is in the habit of using the stomach tube for diagnostic purposes, frequently encounters a condition characterised by the absence of free hydrochloric acid, a low total acidity together with a complete or almost complete absence of the ferments. Einhorn, in 1892, applied the term achylia gastrica to the condition, and it is now generally so known. The disease may be either primary or secondary. The latter form is encountered in a variety of diseases. It is most frequently associated with carcinoma of the stomach. It is easy to understand why there should be no secretion when the entire mucous membrane is infiltrated or replaced by the new growth. It is not quite so plain why there should be an absence of gastric juice during the early stage of the growth, while it is still sharply localised to a small area. And it is still more of a mystery why it should be absent with carcinoma

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York, at Syracuse, October 16, 1906.

situated remote from the stomach. It may be found with cancer of any organ. During the past year I encountered it with carcinoma of the bladder some months before there was any evidence of bladder disease.

It is almost constantly found with pernicious anemia. The credit of having first called attention to the association of gastric atrophy with pernicious anemia, has usually been accorded to Fenwick, who, in 1877, reported several cases. As a matter of fact, as Welch points out, it was Austin Flint, who as early as 1860, directed attention to this association. The relation of the gastric atrophy to pernicious anemia has been the source of much speculation and debate. At first it was held that the blood condition was secondary to the atrophy. But gastric atrophy does not always lead to pernicious anemia. While on the other hand, pernicious anemia is encountered without any change in the stomach mucosa. Today it is generally believed that the two conditions do not stand in the relation of cause and effect. It is supposed that both are due to some common toxic cause. It may be encountered with other forms of anemia. I saw a case of splenic anemia in which repeated examinations of the stomach contents failed to reveal any free hydrochloric acid or the ferments. Atrophy of the gastric mucosa is not infrequently seen as the terminal stage of a chronic gastritis. It is found in the late stage of phthisis, sometimes with diabetes and with those disturbances of the heart, liver and kidneys, which lead to chronic gastritis.

Primary achylia gastrica, or achylia gastrica simplex, as Martius calls these cases, is not so serious a disease as the secondary form. There are no gross anatomic lesions to account for the achylia. That a true achylia is ever a purely functional disturbance is denied by some clinicians. However, the belief that it is so appears to be gaining ground. Many of these patients suffer from a variety of nervous symptoms, or at least possess a constitution predisposed to neurasthenia. The undisturbed general condition, despite the apparent severity of the malady, together with the fact that the secretion of the gastric juice sometimes returns after a prolonged absence, argues in favor of a nervous form. Einhorn reports a case in which the hydrochloric acid reappeared after an absence of five years. I was, recently, agreeably surprised to find free hydrochloric acid in the stomach contents of a very nervous woman in whom, previously, repeated examinations during a period of two years had failed to reveal any.

The failure of the stomach to secrete the gastric juice would, at first thought, lead to the inference that the digestive func-

tions would seriously suffer. However, such is not necessarily the case. An achylia may exist for years without causing any symptoms and may then be discovered only accidentally. Hemmeter mentions a medical student who was totally ignorant of any abnormality, in whom the condition was discovered while making routine stomach analysis of the class. Einhorn reports one case that he had observed for four years and whose general condition, if anything, improved; and another in which he believes the condition had existed for over forty years. Ewald also treated a case in which the secretion was absent for two and-a-half years, yet the patient gained forty-two pounds. I have observed a number of cases who have more than held their own for over two years. The absence of serious disturbances, in these cases, proves that the stomach is not necessarily essential to life. Modern surgery has demonstrated that not only can life go on after its removal (as has been done for carcinoma) but that weight may be even gained afterward.

The intestine can perform not only its own functions but that of the stomach as well. The pancreatic juice with its triple ferment is capable of digesting the proteids, carbohydrates, and fats which make up our dietary. It is of the greatest importance, however, that the motor functions of the stomach should be unimpaired. If an atony or a stenosis be present the entrance of food into the intestines is interfered with, and digestion is hindered. The intestinal mucosa must also be intact. If there be an intestinal atrophy, nutrition must suffer severely. As a rule the motor function is retained in achylia not due to carcinoma obstructing the pyloric orifice.

The stomach not only empties itself thoroughly, but as a rule much quicker than normally. It is often necessary to aspirate within half an hour after the test breakfast to obtain sufficient contents for examination. The hypermotility is no doubt due to the absence of hydrochloric acid. Physiologists tell us that the closure of the pylorus is due to the irritating action of the hydrochloric acid on its mucosa, and it only opens when the alkaline intestinal secretion neutralises the acidity of the chyme in the upper portion of the duodenum. The absence of the hydrochloric acid would mean a continually relaxed pylorus through which the food could readily escape. But sooner or later this vicarious action of the intestines begins to fail and the patient suffers more or less. He complains of a feeling of pressure or distress after eating. Severe pains are occasionally present, but as a rule they are absent. The appetite is usually poor; it may however be normal. Pain when present begins directly after eating and its severity frequently varies with the

size and character of the ingested meal. Sometimes the pain is relieved by the taking of food, in this respect resembling cases of hyperchlorhydria, a fact to which Einhorn called attention. Frequently a variety of nervous symptoms are associated with the above. There may be headache, vertigo, disturbed sleep, a feeling of fatigue, and lack of ambition.

Occasionally the patients are aware of something wrong with their digestion although unable to accurately describe their symptoms. In fully half of the cases intestinal symptoms, sooner or later, make their appearance. Occasionally it is their presence that calls attention to the malady. Diarrhea is the most frequent bowel disturbance. The patients have from three to five movements daily, occasionally the bowels move several times in succession early in the morning before breakfast. Sometimes they move directly after a meal. The movements are preceded by rumbling and gurgling noises in the abdomen. There is no straining. Sharp attacks of colic are only rarely present. Examination of the stools, especially after the ingestion of raw or partly cooked meat, shows large masses of undigested meat, unchanged connective tissue, the residue of vegetable cells and little if any fat. The feces frequently have a very offensive odor. In some cases constipation is the rule or there may be alternating periods, of diarrhea and constipation.

When the diarrhea persists for any length of time, the general condition suffers, the patients lose in flesh, becoming weak and may even become cachectic. This diarrhea is one of the most characteristic symptoms of achylia gastrica. Occasionally it is the only symptom. There is nothing to call attention to the stomach as the offending organ. The patients go to the physician believing themselves suffering from some bowel disturbance. The importance of this form of dyspeptic diarrhea cannot be overstated. If properly interpreted it responds readily to treatment, while the ordinary treatment for diarrhea is entirely without effect. The reasons for the diarrhea are apparent. In the first place the food not being properly ground up in the stomach reaches the intestines in a coarse state, and accordingly increases its mechanical as well as its chemical labors. This extra work leads to inflammatory change in the intestinal mucosa eventually leading to atrophy. But long before the atrophy stage is reached diarrhea may make its appearance. The hydrochloric acid of the stomach besides having digestive function aids in the disinfection of the bowels. Experiments have shown, that while the jejunum is normally sterile, in cases of achylia it swarms with bacteria. Pawlow has shown that the entrance of the acidified chyme into the duodenum acts as a

powerful stimulant of pancreatic secretion. The absence of the hydrochloric acid means a poor pancreatic secretion, with its attending imperfect intestinal digestion.

Cases of achylia may for convenience sake be divided into four classes. Class one, includes those cases in which the absence of the hydrochloric acid and ferments causes no symptoms. Naturally such cases do not come to the physicians for stomach trouble. The condition is only accidentally discovered. Class two, includes those cases suffering from stomach symptoms without any associated bowel disturbance. Class three, includes those suffering from stomach and intestinal symptoms, while class four, includes those presenting intestinal symptoms only. The following cases are illustrative of classes two, three, and four.

Case I. Mrs. C. aet. 40, usual diseases of childhood. Two years ago had an attack of neuritis. For some time past has had pain in the epigastric region. The pain is independent of the taking of food, yet a heavy meal aggravates it. Occasionally, it continues during the entire night. No nausea or vomiting, but belches and bloats. Constipated. Sleep disturbed. Very nervous. Examination of the stomach contents after the usual Ewald test breakfast shows the absence of free HCl. Total acidity, four. Filtered contents does not coagulate milk, nor acidulated will it digest a disk of albumen.

Case II. Mrs. C. aet. 44. After eating bloats and belches, appetite good, relishes everything. Headaches. Sleep disturbed, and very nervous. Constipated. Lungs and heart negative. Right kidney palpable. Examination shows the fasting stomach empty. After the usual test meal, the extracted contents shows the bread but slightly changed, and imbedded in the mucus. No free HCl. Total acidity, four.

Case III. Mrs. B. aet. 30. Perfectly well up to two years ago. Illness began with indefinite pains across the epigastrium. Appetite poor. Belches and bloats. Pains same day and night. Eating does not seem to affect them. Constipated. Fasting stomach empty. After test breakfast, the extracted contents showed the bread imbedded in a mass of mucus which passed through the tube with difficulty. Free HClO. Total acidity, four.

Case IV. Mrs. W., aet. 43. History negative, except she has always been constipated. For several years has been distressed after eating; nauseated at times, but did not vomit. About two years ago had an attack of diarrhea which lasted several months. She became weak and emaciated. She improved, but since then has had occasional attacks of diarrhea. She also suffers from very sharp pains in the epigastrium and abdomen. The pains come on about an hour after eating. Sometimes eating relieves them. She is nauseated. Vomits occasion-

ally. Belches and bloats. Sleep is disturbed. Headache, dizzy, and very nervous. Examination shows the greater curvature three inches below the navel (gastroptosis). The right kidney is freely movable. After the test breakfast, the food is softened but otherwise unchanged. Free HClO. Total acidity, 8. Examination of the feces after a meat meal showed large masses of striated muscle fibre, much unchanged connective tissue, some vegetable cells, but little fat.

Case V., Mrs. S., aet. 30. History negative, except that she was always nervous. For the past two years has been troubled with attacks of diarrhea alternating with constipation. The diarrhea sometimes lasts but a few days, at other times it continues a month or more. She had four or five movements daily, usually after meals. The appetite was good, and her appearance that of a well nourished woman. There was nothing to call attention to the stomach as the offending organ. Examination of the stomach contents after the usual test breakfast failed to reveal any free HCl. The total acidity was 6. Examination of the feces showed large masses of undigested meat as in case four.

The diagnosis of achylia gastrica is very simple when the stomach tube is used. From the symptoms alone no positive diagnosis can be made, although when diarrhea is present it may be suspected. Sometimes the clinical picture resembles that of hyperchlorhydria. The absence of the free hydrochloric acid, and a total acidity not exceeding the acidity of the ingested meal makes the diagnosis. The ferments are usually absent although small quantities of pepsin may be shown to be present both in the stomach contents and in the urine by means of the more delicate tests used for this purpose. Much care however is needed to distinguish the primary from the secondary form.

It is not my intention to go into the details of treatment, but simply to touch on a few of the most important points. Of first importance is the diet. As the intestine is capable of digesting proteids, carbohydrates, and fats, a wide latitude in the choice of food may be allowed. Its preparation, on the other hand, is of the utmost importance. All meats must be thoroughly cooked so that the fibers easily separate. Connective tissue and tough fibrous meats must be avoided; likewise coarse fibrous vegetables. Thick vegetable purees are most suitable. The food must be thoroughly masticated. If the teeth are bad as they frequently are with digestive disturbances, the dentist's aid must be sought. Milk on account of the absence of the rennet, passes into the intestine unchanged, and is frequently not well borne.

Of drugs, hydrochloric acid and pepsin, especially the former, are of value. While it is not possible to introduce sufficient hydrochloric acid to equal the amount normally secreted by the

stomach, good results are not infrequently obtained from small quantities. It is particularly valuable in cases complicated with diarrhea. In almost all of these cases improvement follows its administration. I am in the habit of following Ewald's plan of administering fifteen drops of the diluted hydrochloric acid one-half, one, and one and one-half hours after each meal. In some cases it also acts favorably on the nervous symptoms. Nux vomica, condurango, gentian, and the other bitter tonics are of use in combating the stomach distress. Lavage is only indicated when much mucus is secreted.

717 EAST GENESEE STREET.

Conservatism in Modern Therapeutics.¹

By MILTON E. GREGG, M.D., Elbridge, N. Y.

THERAPEUTICS is perhaps the highest and most skilful of all the medical arts. She comes to us the child of the selfsacrificing and oftentimes unremunerated toil of the centuries gone by. Out of the clouds and thick darkness of the past she emerges as an angel of light with a glorious mission, the alleviation of human suffering and the saving of human life. Should we not guard her well? Should we not watch over her with jealous eye promptly repelling any influence that tends to lessen her power for good? That such influences are at work is evident to the careful observer and they demand our earnest consideration. I shall briefly discuss a fact, a principle, and a duty.

That this is an age of new things in therapeutics is a fact requiring little demonstration. In pharmacy we have a multitudinous array of drugs many of which are new, and many of the old ones are combined in new formulas with new and unfamiliar trade names that confuse the prescriber. Then again, the recent discoveries in the scientific world have an important bearing on modern therapeutics. Scarcely more than a decade has passed since Professor Roentgen discovered while experimenting with the cathode rays a peculiar and hitherto unknown radiative invisible to the naked eye, but capable of passing through substances opaque to ordinary light and of producing luminous effects when allowed to fall on fluorescent substances and like light, able to produce the chemical decomposition necessary for producing photographic effects.

The following year Henri Becquerel observed that the salts of uranium without previous exposure to sunlight were capable of giving off rays similar in their action to the Roentgen or x -

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York at Syracuse, October 16, 1906.

rays. A few months later the rare substances, polonium and radium, were discovered possessing radioactivity 100,000 times as great as uranium. Some theory had to be propounded to account for this strange phenomena known as radioactivity.

Dalton's theory of the indestructibility of atoms was shaken and a new theory was advanced by Professor Thomson and other physicists, who believe that it is possible to break off from an atom a quantity not exceeding the one one-thousandth of the whole. When a current of electricity is passed through a gas, it is supposed that some of the atoms are torn apart, divided into the so-called corpuscles, which carry opposite charges of electricity and so repel each other. This division of atoms is termed ionization of gases, the pet hobby of the electrotherapeutics.

Long ago when the spectroscope revealed to the scientist that, along with the evolution of the planets from their parent nebulae—there was a corresponding evolution of the chemical elements from simpler forms of matter, it dawned upon him that possibly matter is, in the final analysis, one of *these*. This suspicion has been greatly strengthened by the recently observed phenomena. However, the up-to-date radio-therapist has not attempted the direct realization of the alchemist's dream, but has contented himself with getting his gold (from the pockets of his patients) by the simple process of extraction.

Then again, the scientific psychology of the present and certain new and strange cults have their influence in the treatment of disease. Mystic medical doctrines have always had a following, from the days of Mesmer to the advent of Dowie and Mary Baker Eddy, and even members of the ethical profession claim to cure many diseases through suggestion and hypnotism. We must admit that modern therapeutics is somewhat encroached upon by the mystical.

Now, it is a well recognised principle that any great event, any important discovery or announcement, is accompanied by an unusual degree of susceptibility. This principle applies not only to individuals, families or nations, but to schools of thought and the professions as well. The medical profession is at present in this period of susceptibility, whereby it is easy to cut loose from the old and time worn paths and to rush headlong into the unknown realms of therapeutics. In the field of radioactivity, enthusiasm has certainly outrun caution. We have talked too much and promised too much. After all the excitement subsides, and we calmly and judiciously weigh the evidence it may appear that radioactivity is of little therapeutic value. Electricity, too, may not be the cure-all it is believed to be by its ardent devotees.

Commercialism, whether we are willing to admit it or not, is becoming a powerful if not a dominant influence in our pro-

fession. We do not have to look far beneath the surface to discover a restlessness, a secret admiration for a certain school of quacks who are making medicine a highly remunerative business and who curse the code and the ethical profession. Medicine is, or should be, more exalted than a mere business, but I am persuaded the crackling of electrical machines, the discharge of Leyden jars, the flashing of violet light and all the accompanying mystifying phenomena of the radio- and electrotherapeutist are in many instances the means whereby medicine is degraded to the level of a mere business. I do not desire to be understood as stating that all men who are using the various forms of mechanical treatment, are of necessity quacks. Far from it. But the use of these things for the purpose of getting money from the gullible public can not be too severely censured. I believe it is also true that the indiscriminate use of machines in therapeutics tends toward a lighter regard for medical ethics and the ethical profession.

Then again, physicians, and I take to myself a share of blame, are exceedingly susceptible to the wiles of the manufacturing chemist. His well dressed, smooth tongued and persuasive representative delights in unfolding to our wondrous gaze his spacious cabinets, filled with many colored samples of the present day pharmaceutical elegance and efficiency. As we think of it, we recall the old rhyme,

“Will you walk into my parlor,
Said the spider to the fly,
Its the nicest little parlor
That ever you did spy.”

And we walk into the meshes of the pharmaceutical web he has woven for us and which he is holding up with ever increasing power. Now, how many of us can tell the exact ingredients with their relative proportion in all the pills and tablets we are using? Hands up! Time was when the doctor had a few remedies whose value he thoroughly knew and which he wisely employed in the treatment of many diseases, but now we have very many remedies for the treatment of almost every single ailment. It is so easy to dispense “so and so’s” pills and tablets and elixirs, labeled for this and that complaint, that we are in danger of excessive drugging, drifting into polypharmacy with all its dire results and of losing our knowledge of individual drug action, which our medical forefathers possessed.

Is it not time we cut our drug bills a little for our own and our patient’s benefit? Is it not time, also, that we aroused ourselves from our therapeutic laziness and began to do our own thinking in fitting carefully selected remedies to our cases, in-

stead of allowing the manufacturing chemist do it for us in selecting the case for the remedy? The manufacturing chemist can do us much good. He can also do us much harm, if we allow him, and we must bear in mind that money is his object first, last, and all the time.

We have already alluded to the susceptibility we show towards Christian Science and allied doctrines, and only say in passing that the therapist who enters the field of medical mysticism is treading on dangerous ground, and unless our attempts to cure by suggestion and kindred methods are carefully guarded, we may be subjected to disappointment and chagrin.

But I must hasten to my closing thought—our duty. There have always been enthusiasts in medicine, exploiting this or that invention or doctrine. The future will continue to produce enthusiasts for, as it has been finely stated, "The history of the past will be the experience of the future." But I am persuaded that but little real good has been done the healing art by the enthusiasts. Progress in therapeutics has been rather by slow and patient endeavor and calm and deferred judgment,—“Line upon line, precept upon precept, here a little and there a little.” So have we climbed and so must we continue to plod along our way. The history of medicine is full of the announcements of cures and systems of cures that have, in most instances, been relegated to the rubbish heap by the test of time. After all, we have few if any specifics. The practice of medicine is still difficult and oftentimes discouraging, but our best therapeutic friends are the old time honored drugs.

Radioactivity, vibration, electricity may aid a little, but can never replace drugs in the treatment of disease. It is our duty to seek a happy medium between therapeutic nihilism and polypharmacy, and to ever study the principles that govern the rational treatment of disease by drugs.

The new roads promise to lead us to glorious things by short and direct routes and we must not be so ultraconservative as to totally ignore them but, as yet, we can not safely leave the old highways, for along them we are ever guided by the mile-stones set up for us by the great men who have gone before,—Sydenham, Bichat, George B. Wood, Alonzo Clark, Austin Flint, J. Milner Fothergill and scores of others who along conservative lines have left their impress upon the art of curing disease.

We must turn a deaf ear to the unconscious quackery of the present that finds its expression in the lamentable lack of restraint which characterises our acceptance of the new and untried. We must find our inspiration in the love of good and honest work and not in the sordid service of Mammon. It rests largely

with the *conservative* therapist to keep medicine above the level of a mere business, to save medicine from its greatest enemy, commercialism. The best doctor is altruistic rather than selfish, cautious rather than imaginative, not choosing the will-of-the-wisps that the public ever delight in, but determined to know the truth that shall make him free indeed. "Verily he shall not lose his reward."

A Case of Pancreatic Cyst.¹

By WILLIAM D. JOHNSON, M.D., Batavia, N.Y.

I AM prompted to report this case of necrosis and cyst of the pancreas at this time, because of the growing interest in diseases of the pancreas in general and pancreatic cyst, in particular, as the one disease of this organ amenable to safe surgical treatment followed by recovery in a large percentage of cases.

I am also influenced by a recognition of the fact that when a sufficient number of case histories have been recorded an intelligent sifting of the symptoms and antemortem findings, will result in formulating for this disease a rational diagnostic formula that will lead to more preoperative diagnosis than one in five, as at present.

The patient was a woman, aged thirty, married, with a negative family history, as regards this disease. She had scarlet fever during childhood and grippe when seventeen, followed by ill health for about six months. For eighteen months previous to the onset of the present illness she had some digestive disorder which was gradually progressive. Six months before the onset, she suffered from a well marked attack of hepatic colic and in the succeeding months had three other rather severe attacks of the same nature, the history of which is quite typical of the passage of gallstones. During these attacks she was slightly jaundiced, the skin not regaining a normal color at any time. No gallstones were discovered or searched for. There was all this time tenderness in the epigastric region, variable gaseous distention, eructations, occasional nausea, but no vomiting, and during the intervals between the acute attacks, she was able to do her household work.

She was seized with an attack July 21, 1905, more severe than the previous ones but similar in kind, and for the first time she vomited at the onset. The pain radiated upward and into both shoulders and was intermittent and colicky in character at first, but later became continuous. Morphine had little power to overcome it. Profuse salivation was present during the first two

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York, at Syracuse, October 16, 1906.

days. After this, it was absent or lost sight of in the presence of more urgent symptoms, the pain becoming constant and the vomiting nearly so, no food being retained for nearly a week, and the patient says she did not sleep for ten days. After this, the symptoms began to abate somewhat, and at the end of two weeks for the first time an epigastric fulness began to be noticed. This fulness gradually increased and caused only a sense of pressure but no acute pain.

I first saw her in consultation with Dr. Prince six weeks after the onset, and at that time the tumor in the upper left quadrant of the abdomen was causing all the discomfort she had. She had lost thirty pounds in weight and was very weak. The skin had a dirty brownish tinge but typical jaundice was absent. There was slight fever, pulse 120, occasional vomiting, the stomach being capable of holding only a few ounces at a time. Constipation was present. The urine contained neither albumin nor sugar. Respiration was impeded by the fulness interfering with the action of the diaphragm. The tumor presenting in the epigastric region was globular and very tense, the fluctuation waves being short and sharp as of a fluid under pressure. Percussion showed the stomach and colon displaced to the level of the umbilicus. The heart was displaced upward and outward, the apex being in the fourth interspace outside the nipple line. The area of dulness from the fluid, extended to the left and down below the region of the kidney and there was slight bulging in the costovertebral angle. The free border of the ribs was elevated and there was no descent of the tumor on inspiration. The history of the case and the examination led me to at once make a diagnosis of pancreatic cyst and advise opening and draining of the same.

Three days later, preparations having been made to operate at her home, I went there and was much surprised to find that during the night the tumor had disappeared entirely. She said that following a sensation of something tearing in the epigastric region, there had been a gradual subsidence of the swelling and relief of the pressure and discomfort.

The fluid, which had almost certainly escaped through the foramen of Winslow, was easily detected in the greater peritoneal cavity, presenting the usual signs of ascites, and was causing absolutely no symptoms of irritation or septic intoxication. In view of this emptying of the lesser peritoneal cavity and the relief of symptoms we decided to await further developments.

The fluid was absorbed in a few days, this absorption being accompanied by profuse diuresis, 80 ounces in twenty-four hours. The patient continued to improve, sat up and was entirely comfortable for a few days. But the signs of a refilling of the lesser

peritoneal cavity soon appeared and at the end of twenty-five days from the emptying of the sac there was as great distention as before; and in the meantime, the patient having entered the Batavia Hospital October 2, I operated, opening the abdomen above the umbilicus in the middle line. The gastrohepatic omentum presented in the opening and so tightly stretched was it that, on introducing a trocar, there occurred a large stellate tear allowing free egress of the thin coffee colored contents. The gall bladder seemed normal and contained one large calculus. The foramen of Winslow having closed by plastic adhesion, the margins of the cyst wall were sewn to the abdominal wall and the cavity explored. Directly at the back lay the pancreas, necrosed, with large loose slaty colored fragments of its body, some free but most of them loosely attached, spread out over the floor of the cavity. The wall of the cyst was smooth, shiny, red gray in color and could not be separated from the surrounding structures. At the opening the wall was one-fourth of an inch thick and somewhat easily torn. A large drainage tube was placed deep in the cavity and the external wound partly closed.

The cyst contained four liters of thin coffee colored fluid, which on standing was covered by a thin oily looking film. It was odorless, alkaline in reaction and had a sp. gr. of 1009. Albumin was abundant, glucose and ferments absent. It contained a few red blood cells, some fatty granular cells and necrotic tissue. There was no leucin, tyrosin or cholesterin and no pus. On culture it was found to be sterile. Blood examination showed four million eight hundred thousand reds, seven thousand whites, differential count of which gave

Polymorphoneuclear	70%
Small nononeuclear	17%
Large nononeuclear	10%
Eosinophiles	1%
Transitional	2%

For the very careful examination of the fluid and blood I am indebted to Dr. Cottis.

The patient stood the operation well and began to improve, this improvement continuing for about a week. Large masses of the necrotic pancreas came away and one of these fragments obstructing the narrowed outlet, caused the secretion of the remaining portions of healthy pancreatic tissue to be retained under pressure. About this time the fluid, which at first was inert began to acquire digestive power irritating the skin severely. There occurred for the first time fat necrosis of the perirenal fat and severe intoxication, with fever, etc., and her condition became grave. A large swelling occurred in the region of the left kidney

and just about as an opening in the loin was decided upon, a free communication with the drainage opening in the epigastric region occurred, accompanied by a discharge of necrosed fat masses and pus. A large flexible tube was used to irrigate this cavity, it being possible to pass it down and to the left at least ten inches. From this time on, she made a rapid recovery and left the hospital October 23, three weeks from the time of entering. A sinus still persists from which a small amount of fluid drains, the fluid being inert. Repeated efforts have been made to promote closure of this sinus, all of which have been ineffectual.

The points of interest in this case are:

1. The occurrence of necrosis and pancreatic cyst following hepatic colic.
2. The closure of the foramen of Winslow and retention of fluid in the lesser peritoneal cavity, and the opening under pressure of this foramen with discharge of the fluid into the greater cavity; its absorption and elimination without producing serious symptoms; the subsequent closure and refilling.
3. The resumption of digestive activity of the fluid after relief of pressure and separation of the necrosed portion of the pancreas.

The etiology and pathology of pancreatic cysts are, at present, not well understood, and even in the classification there is much confusion. Tilger thinks all cysts except those connected with new growths, depend upon hindrance to the outflow of the secretion of the gland and consequent degeneration of gland epithelium, which permit autodigestion and escape of secretion.

The association of gallstones in this case and the history of their passage point to a probable obstruction of the duct of Wirsung. At the same time the presence of a gallstone in the common duct, which passes in the margin of the foramen of Winslow, may have set up a low grade inflammation which closed the passage from the lesser to the greater peritoneal cavity, the fluid being retained in the lesser sac. If gallstones were a common cause of obstruction of the pancreatic duct and consequent formation of pancreatic cysts, women should be the most frequent sufferers and most cases should occur after the fortieth year, but the sexes are equally affected and most cases occur before this age, fifty per cent. between thirty and forty. Acute pancreatitis likewise cannot be a frequent cause as 90% of the cases occur in men at a later period of life.

Gangrene of the pancreas is followed by a collection of pus in the lesser peritoneal sac in some instances and is necessarily due to septic microorganisms. This case was one of aseptic necrosis as shown by the cultures taken at the time of operation and the

nontoxic character of the fluid when liberated into the general peritoneal cavity, which occurred three weeks previous to the operation. In the embryo the pancreas springs as a bud from the duodenum and is at first entirely surrounded by peritoneum, the posterior mesopancreas later becomes absorbed and is replaced by areolar tissue which is continuous with the areolar tissue surrounding the left kidney. This connection accounts for the line of extension of fat necrosis subsequent to operation. That a portion of the pancreas remained intact is proven by the resumption of activity of the fluid discharged, and the absence of diabetes which would have occurred had the islands of Langerhans all been destroyed.

Iodine and Some of Its Uses in Surgical Work.¹

By JOHN EGARTON CANNADY, M.D.

Surgeon-in-Charge Sheltering Arms Hospital, Hansford, W. Va.

[*Author's Abstract.*]

IODINE is an exceedingly active substance chemically, and belongs to the halogen group. It possesses great affinities for many substances, and its exact use and sphere of action in the body are unknown. It enters largely into the composition of sea food and animals subsisting on this food contain their share of this evanescent substance. It makes the circuit of the body circulation in a short time and is eliminated in the saliva, urine, and feces.

Senn, in his recent trip among the Esquimaux, noted that iodine is liberally incorporated in the food of these people. He observed the remarkable absence of tumors of all sorts, the exceedingly benign course of syphilis, the absence of enlarged tonsils, lymphatic glands and goiter. He attributes this immunity to their use of iodised food. Sternberg, Senn, Koch, Schill, Fisher, Behring, Tavel and more recently Kinnaman, have emphasised the value of iodine as an antiseptic. It is certainly the most powerful as well as the least harmful germicide we possess.

Kinnaman has performed an unusually elaborate and careful series of experiments with a view to the determination of the actual antiseptic value of the drug. He made use of a solution containing iodine 2.5 gm., sodium iodid 5.5 gm., sterile water 250 cc., making 1-100 solution. A 1-100 solution of mercuric chlorid acting on a culture of streptococcus pyogenes for 15 minutes, showed a good deal of inhibitory power for the first day but allowed a good growth of streptococci to appear. An exposure of 30 minutes, however, gave no growth. The superiority of iodine is readily evidenced by the fact that a comparatively

1. Original communication published in *American Medicine*.

weak solution (0.8 per cent.) killed the streptococcus after two minutes exposure. To iodine the staphylococcus is far more resistant than is the streptococcus. While it takes a 1-100 solution five minutes to kill the former, a 1-500 solution is fatal to the latter in two minutes. Dr. Kinnaman's conclusions are that in a solution of iodine varying from 0.2 to 1-6 per cent. we have a germicidal agent of marked potency. Its bactericidal power is far superior to mercuric chlorid, the acknowledged leader of all antiseptics.

The author reports a case of multiple tuberculous abscesses of the muscles of the chest and back, treated by repeated injections of iodoform in olive oil in which the results were most gratifying. He calls attention to the fact that the injection of the emulsion into the joint is naturally followed by a rise of temperature which may last for several days.

The iodoform gauze treatment of puerperal aepsis introduced by the late Dr. Pryor, of New York, is commented on most favorably. The method is considered to be unassailable from a deductive as well as a resultant point of view. Pryor packed the uterus and the retrouterine space with iodoform gauze after thorough curetting and irrigating. The iodoform gauze filling of von Mosetig-Moorhoof has been found to be a most valuable adjunct in the treatment of the circumscribed chronic osteomyelitis.

Aumond and Bonnaire use the following formula for an irrigating solution: iodine 3 gm., potassium iodid 6 gm., water 1,000 gm. They make use of the pure tincture as a local application prior to curetment as a means of partially sterilising the inside of the uterus. Many of the oldtime gynecologists were in the habit of making an application of the plain tincture to the inside of the uterus after curetment.

Iodine in weak solution as an irrigation fluid is of much value in the treatment of suppurative conditions, for example, suppurative arthritis, abscess, empyema, and the like. The author has several times used a one per cent. solution in the treatment of suppurating sinuses and wounds, with the result that there was a prompt disappearance of pus and an abundant formation of healthy granulation tissue. It must not be forgotten that, although iodine is the most harmless of antiseptics, it and its compound iodoform are active agents and as such should be used with caution. They are under circumstances powerfully toxic. It is after injection into serous cavities that the most serious results are seen. The pyogenic membrane lining the tuberculous or pus cavity seems to possess the power of immunity to a marked degree. The old and enfeebled patient will be much more sus-

ceptible to the poisonous action than the more robust. It is a well known fact that an individual suffering from septic infection will tolerate much more iodine without the symptoms of poisoning, than one under normal conditions. Rarely there are found persons having so marked an idiosyncrasy for iodoform that it will act as a poison when exhibited in the usual manner in small amounts.

The author uses a one-half of one per cent. alcoholic solution for purposes of hand disinfection preliminary to operative work, whenever rubber gloves are not worn. The same solution is made use of in the preparation of the site of the operative incision. Rubber gloves are worn as a routine measure in operative work, but in certain number of instances gloves are undesirable; again, in an occasional septic case, a glove may be punctured or torn, and the operator feels the need of some reliable antiseptic for his own sake as well as for the protection of his future patients. The use of this solution simplifies the technic and saves time. The method practised is as follows: first thorough scrubbing with nail brush, green soap and running hot water, going over the hands in a systematic and methodical manner, taking each part in its turn and always following the same order so as to skip no part. Particular attention is paid to the nail folds subungual spaces, and the skin between the fingers. Short clipped nails should be cleaned with an orangewood stick, the hands scrubbed again, washing off the soap in running hot water. Remove the residue of the soap with 70 per cent. solution of alcohol, immerse in iodine solution for five minutes, rinse in sterile water. The light-brown stain can be removed by washing in dilute ammonia water after operations, or if left alone will soon disappear.

The results clinically of this method have been superb. In a long series of cases no infection attributable to the hands has occurred.

In his conclusions the author states his belief that the iodine constitutes a near approach to a perfect antiseptic, in that it is nontoxic in effective strength, being one-fourth as poisonous as mercuric chlorid though many times more valuable as a 'germicide. It does not coagulate albumin or form inert compounds with the tissues. It possesses great penetrating power, is easily prepared, and is stable. A solution of iodine is the most practicable chemical agent we have for the sterilisation of the skin.

She (sympathetically)—And that scar on your face is from a bullet wound? How was it that you were shot in the face?

Spanish War Veteran—I foolishly looked back.—Harper's Weekly.

Carcinoma Cutis.

A Clinical Lecture in Abstract.

By JOHN V. SHOEMAKER, M.D., LL.D., Philadelphia.

Professor of Materia Medica, Therapeutics, Clinical Medicine and Diseases of the Skin
in the Medico-Chirurgical College and Hospital of Philadelphia,

THIS male patient, age 56 years, nativity Ireland, is suffering from a disease which is typical, yet if not properly studied may lead to making a wrong diagnosis. Over the right mastoid is situated an ulcer the edges of which are everted; the surface is sloughing and the tissues around the ulcer are infiltrated and hard. The patient stated that the ulcer has been increasing in size gradually, is painful at times, with a burning sensation radiating down the side of his neck into his ear. The lymphatic glands in the cervical and submaxillary regions are all hard and enlarged. The skin over the neck and face is covered with many little nodules and areas of carcinomatous tissue. Some of the lesions are large and dark in appearance, while others are smaller and appear to be in a stage of active inflammation. The ulcer over the mastoid first began as a papule, following a slight cut with the razor. Later a crust formed, which came away leaving a raw ulceration.

The ulceration in these cases is due to the increasing pressure of the new material upon the cutaneous vessels, the vascular supply being diminished or cut off from the affected parts and ulceration or gangrene resulting. Fresh nodules develop as a rule in other portions of the body, as seen on this patient's face and neck. The lymphatic glands become hard, nutrition being interfered with, the patient becoming more and more emaciated, and finally perishes from exhaustion.

From the history of the onset, the glandular involvement, and the many nodules on the surrounding portions of the skin, this case can readily and properly be diagnosticated carcinoma cutis. The only diseases with which carcinoma could be confounded are sarcoma, and lymphadenoma. Sarcoma, however, never attacks the lymphatic glands, while carcinoma even at an early date invades these structures. Lymphadenoma, on the other hand, involves the lymphatic system also, but it is a painless disease of long duration, and usually makes its appearance in the cervical glands. Carcinoma, on the contrary, is of comparatively short duration, is accompanied by more or less pain and by marked emaciation, and the cervical glands are not so much enlarged as in lymphadenoma.

The pathological condition of this form of carcinoma presented under the microscope is a dense network of connective

tissue arranged in alveolar masses, the meshes of which are filled with many round epithelial cells.

The etiological factors of carcinoma are still involved in mystery. The most plausible theory of its production is that which supposes it to be due to a disturbance of the functions of the trophic system. Probably it is a chemical change that takes place in the tissues.

The *x*-ray treatment is the best and probably the most available for this patient. I have seen excellent results from the application of the *x*-ray and it may not only heal the ulceration but, as it often has, cause the disappearance of the nodules entirely.

I am in hopes by keeping up the patient's general health with tonics and especially so by giving arsenic, that we may be able to retard the disease and hold it in subjection. The *x*-ray may, in the meanwhile, heal the ulcer which is now in an active stage of ulceration, and also compel the nodules to actually disappear. By this combined treatment we may be able to clear up the deposits upon and in the skin, and in this way prolong the life of the patient.

The prognosis, however, is always unfavorable; few recover from the disease; the majority of the patients die in the course of a few years.

1519 WALNUT STREET.

CLINICAL REPORTS.

A Case of Monocular Hysterical Amblyopia.

By D. B. ST. JOHN ROOSA, M.D.

Professor of Diseases of the Eye and Ear, New York Post Graduate Medical School and Hospital.

[*The Post-Graduate, February, 1907.*]

HELEN K., aged 18, cigar maker, came to my clinic at the Post-Graduate in November, stating that she had suddenly lost the sight of the right eye. On examination it was found that she had only quantitative perception of light in that eye, while in the other the vision was 20/20. The patient stated that she found the sight defective five days ago in the morning and that it became worse during the day until it had come to be a total loss. On inquiry as to her general condition she stated that she considered herself well except as to her sight. Two months ago her left arm and forearm and knee were numb for some days, but she had gradually recovered. The patient, a Jewess, looked well, but belonged to the nervous type.

The ophthalmoscopic examination made by Dr. MacPherson, chief of the clinic, Dr. Emerson, and myself, showed beautifully

clear media, the optic papillæ glistening white, the bloodvessels and the retina entirely transparent and sound. The fundus of the eye with normal vision appeared exactly the same as that of the amblyopic eye. The patient was admitted to the hospital, the urine and blood examined with negative results. She was ordered to have the ordinary diet of the hospital, to go out in the open air on all fit days, and encouraged to believe that she would fully recover her sight. No medicine was given except a placebo.

My colleague, Professor Graeme Hammond, saw the case for me at one of his clinics and confirmed the diagnosis of hysteria. Dr. Hammond found the hysterical area, that is to say, regions of numbness in some of the extremities with exaggerated sensations around these areas. He also noted that the cornea was insensible on the amblyopic side. The sight gradually returned and she was discharged from the hospital in twenty days with vision 20/20 on each side.

It is almost impossible to get either in a clinic or a hospital an exact idea of the surroundings at the home of a patient. This is a detriment in many cases of disease where the conditions are not exclusively local, and it is especially so in affections of the nervous system. There is no substitute for the knowledge to be obtained by personal view of the surroundings in the home of the patient. Yet thorough inquiries will usually determine whether any special indications for the origin of hysteria are to be found. All the authorities agree that in these are to be found usually the causes of general hysteria, which assume various forms and vary from cases of neurasthenia, with the violent outbursts, to cases like this one here given. In this there were no hysterical seizures except the numbness of one of the legs and the amblyopia of one eye. It is probable that monocular hysterical amblyopia is rare. The amblyopia is usually in both eyes. The diagnosis is really not difficult in either case, but it is certainly easier in the monocular form, for if we find that ophthalmoscopic pictures exactly the same in the non-seeing eye as in the one with normal vision, the pupillar reflex for light the same, we are well on the road to a diagnosis of malingering or hysterical amblyopia. Fuchs¹ remarks that the diagnosis between the former conditions and those of hysteria is not always without difficulty, but as he remarks, the presence of other hysterical symptoms which existed in this case will materially aid us to a conclusion.

The necessity of the examination of the *fundus oculi* by an expert in all cases of alleged monocular hysterical amblyopia is obvious. In this case I am informed that a diagnosis of retinitis

1. Lehrbuck. 2d Edition. P. 496.

and brain tumor was made by a physician who examined the case. Whether this be true or not, it is evident that the best experience is needed for that part of the investigation of any form of amblyopia. In some cases when serious lesions exist in the cerebrum or cerebellum, the ophthalmoscopic examination gives no sign. Then again there are numerous deviations from the ideal type of healthy papillæ, bloodvessels and choroid without organic disease of the eye, the optic nerve or the brain, which only a large experience can positively decide upon. The patient whose case is above given is of a race that may be called neurotic—at least in comparison with some others. Although with a humble occupation, she was of a refined, introspective type, which, all authorities agree as being somewhat disposed to hysteria.

I am inclined to think that only a small proportion of the cases that actually occur of hysterical amblyopia affecting both eyes come to the examination of an ophthalmologist. General practitioners are so generally well informed as to hysteria in general, and aware of the frequent existence of amblyopia as one of its symptoms that such patients are not often sent to a specialist unless unusual features are presented.

SOCIETY PROCEEDINGS.

Medical Society of the County of Erie.

THE regular quarterly meeting of the Medical Society of the County of Erie was called to order at 8:45 o'clock p.m., on Monday, April 8th, 1907, in the rooms of the Buffalo Society of Natural Sciences, by the president, Dr. A. H. Briggs.

Minutes of the regular meeting held January 14, 1907, and of the special meeting held February 19, 1907, were read and on motion approved, as were also the minutes of council held April 1, 1907.

Dr. Grosvenor, of the auditing committee, presented the following report:

To the Medical Society of the County of Erie:

Your committee appointed at the last regular meeting of the society, January 14, 1907, to audit the accounts of the treasurer for the year 1906 has performed that service and has found as follows:

Balance on hand, January 1st, 1906.....	\$ 93.91
Total receipts during the year 1906.....	<u>1,175.25</u>
Total balance and receipts.....	1,269.16
Total disbursements during 1906.....	<u>\$1,083.72</u>
Balance on hand January 1st, 1907.....	185.44

These figures are in accord with the report of the treasurer made at the last regular meeting of the society.

The treasurer holds vouchers for all disbursements.

The balance on his books January 1st, 1907, agrees with the balance in bank to his credit as treasurer, as shown on his bank book.

We therefore certify that the accounts of Dewitt C. Greene, treasurer of the Medical Society of the County of Erie for the year 1906, are correct.

On January 1st, 1907, 175 members were in arrears for dues, to the amount of \$1,410.00. This amount does not include members who have left the county under indebtedness to the society, nor does it include members who died before liquidating the dues which they owed to the society.

Your committee recommends that proper and effective measures be adopted for collecting all collectible dues which have accrued against members of the society.

A copy of the report of the treasurer for the year ending Dec. 31, 1906, and a list of members who were in arrears for Dues on January 14, 1907, accompany this report of the auditing committee.

J. W. GROSVENOR
GEORGE L. BROWN
DELANCEY ROCHESTER

Auditing Committee.

Buffalo, N. Y.

April 8, 1907.

Copy of report of Dr. Dewitt C. Greene, treasurer of the Medical Society of the County of Erie, for the year ending Dec. 31, 1906:

RESOURCES.

Jan. 1.	Balance on hand as per report for 1905.....	\$ 93.91
8.	Louisa Busch, fine.....	250.00
	Dues collected, 1906, per cash book.....	<u>925.25</u>
	Total resources....	\$1,269.16

1906.

LIABILITIES.

Jan.	6.	Secretary, expense account.....	\$ 8.00
	8.	John Lord O'Brien, legal services, 1905	250.00
	23.	Dr. Edwd. Clark, expense to Albany..	20.00
	23.	Red Jacket Press, printing for secre- tary	2.50
	29.	Med. Soc. State New York, Transac- tions 1904-5	25.00
Mar.	1.	John Lord O'Brian, legal services....	50.00
	6.	Secretary, expense account.....	12.00
Apr.	13.	C. W. Miller, janitor.....	3.00
May	9.	Rubber stamp for treasurer.....	.75
	10.	Postage stamps for treasurer.....	6.00
	26.	Red Jacket Press, printing for secre- tary	18.75
	26.	Red Jacket Press, printing for secre- tary	3.00
	26.	Secretary, expense account	24.78
	26.	Postage stamps for treasurer.....	2.00
June	6.	R. L. Polk, Medical Register.....	6.00
	12.	Truckman, conveying transactions to meet- ing	.75
	29.	N.A.T. Carrell, printing.....	13.20
Dec.	13.	Buff. Med. Journal to August 1907....	2.00
	13.	Postage stamps for treasurer.....	2.00
	29.	Secretary, expense account.....	28.89
	31.	Red Jacket Press, printing for sec- retary	14.10
1906.		Paid State Treasurer, dues.....	591.00
Total disbursements.....			<u>\$1,083.72</u>
Balance on hand January 1st, 1907.....			185.44
DEWITT C. GREENE,			
Treasurer.			

Dr. Krauss moved to receive, accept, and place the report on file. Carried.

The secretary wanted to know if the list of members submitted as in arrears should be published. He was informed that this was not the intention; the list was merely for the information of the society.

On motion of Dr. Kennerson, the auditing committee's report was referred to the membership committee which is still at work on the subject of revising the membership list.

The president submitted the following communication:

DR. A. H. BRIGGS,

President of the Medical Society of the County of Erie.

Dear Sir: At the regular March meeting of the staff of the Erie County Hospital the following resolution was passed—namely, that the recommendations of the tuberculosis committee of the Charity Organisation Society of Buffalo concerning changes at the tuberculosis ward of the Erie County Hospital, together with the proposition for a separation of the Erie County Hospital from the Erie County Almhouse, be called to the attention of the officers of the Medical Society of the County of Erie, with the request that a special meeting of that society be called to consider the matter, and that the members of the Erie County Homeopathic Society be invited to be present and take part in the meeting.

Pursuant to this resolution, I would respectfully request that such a meeting be called.

MARSHALL CLINTON,
Secretary.

Moved by Dr. Kennerson that this matter be considered at the next regular meeting of this society.

Dr. Bennett hoped this motion would not prevail, as it would delay an important matter too long, and he also expressed the desire that the Homeopathic society be invited to be present. He moved, in amendment, that it be considered at a special meeting, the date to be fixed by the Council.

The amendment was lost and the motion was then carried.

No candidates were proposed and no report was received from the committee on membership. No further business coming up for consideration, the president then announced the literary part of the program, and introduced Dr. William C. Krauss, who read a paper on the necessity of establishing a bacteriological laboratory in every community.

Dr. Grosvenor stated that the facts presented in Dr. Krauss's paper were certainly remarkable, and suggested that similar papers be presented at every county society in the state, for the purpose of agitation along this line.

The next essayist was Dr. Vertner Kennerson who presented a report of nine gunshot wounds of the body.

Dr. George E. Fell gave a short talk on his recent observations in the western states, after which the society adjourned.

FRANKLIN C. GRAM, M.D.
Secretary.

MEETING OF THE COUNCIL.

A meeting of the Council of the Medical Society of the County of Erie was held at the University Club, Buffalo, N. Y., Monday, April 1, 1907, at 5 o'clock p.m.

Present—the president A. H. Briggs, second vice-president James S. Smith, and secretary F. C. Gram.

It was decided to hold the regular April meeting on Monday, April 8, 1907, at 8:30 o'clock p.m., at the rooms of the Society of Natural Sciences, providing the secretary can secure the use of the rooms.

The program for the meeting was also arranged.

The Council then adjourned.

FRANKLIN C. GRAM, M.D.

Secretary.

PROGRESS IN MEDICAL SCIENCE.

Medical Jurisprudence.

By E. S. McKEE, M.D., Cincinnati.

[*Lancet-Clinic.*]

THE MEDICAL EXPERT AND HIS TRIALS.

L. B. Sawyer, M.D., Professor of Medical Jurisprudence in the University Medical College, Kansas City, Mo., discusses this subject. He says much has been written in the medical world of the abuses by what is known as the professional witness or expert. Physicians are not, as a rule, untruthful; indeed, my experience has been that they are of as high a standard as men in any walk of life, but many of them seem to have a peculiar conception of their duty when testifying in court. Unfortunately, the rule is that they take one side or the other of each case, and in their desire to convince the court and jury of their views, go to great lengths in evading direct answers, and even greater in evading the direct issue. A physician recently said to me: "Expert testimony is a farce from any standpoint." A board of managers has been suggested to whom all legal disputes, in which a medical question is involved, should be referred.

Other questions, fully as impracticable have been suggested, but none has yet been offered that seems to meet the situation. In every community where medical testimony is used to any great extent there are well-established and active medical societies. Let each such society have a standing committee on medical testimony. Let this committee furnish the most recent evidence obtainable to the association. It need not be used with a view of exposing the witness to ridicule, nor for criticism, but for the

purpose of educating the profession on the questions that are in litigation. The result will be that physicians will be brought to know that the rash statements which they make to innocent (?) lawyers may be discussed by their brothers, and such statements as given by a prominent physician on the witness stand will not be made. Who will deny that publicity will not check such practices, as it has done in politics and graft and trusts?

MEDICAL EXPERT EVIDENCE AND THE BILL PENDING BEFORE THE
MAINE LEGISLATURE.

THIS is the subject of an address before the Fellows of the Maine Academy of Medicine and Science by the Hon. Clark Bell of New York, president of the New York Medico-Legal Society and editor of the New York *Medico-Legal Journal*. He enumerates the following to which he objects:

1. Partisanship of medical experts.
2. The payment of large sums to medical expert witnesses for their services.
3. The growing practice of having physicians attend constantly while evidence is being taken and then asking them what is their professional opinion upon all the evidence thus heard by them.
4. The hypothetical question.

The value and efficiency and public utility of medical expert testimony has fallen in great disfavor among all classes of our people in a lamentable degree, a fact which no member of the profession of law or medicine can longer disregard or ignore. So long as medical experts can be found who will swear directly opposite to each other, it is time for legislation to arrest the evil. The bill before the legislature of the state of Maine, which is under discussion in the paper by Mr. Bell, provides for the appointment of one or more examiners in cases where an expert opinion or evidence is admissible. The examiner, at the request of either party or the court appointing him, shall make such examination or study of the subject matter or question as he deems necessary for a full understanding thereof, and such further reasonable pertinent examination as either party shall request. Reasonable notice shall be given each party of physical examination of persons, things and places, and each party may be represented at such places. The bill provides that these examiners shall be paid by the state and the amount of their compensation fixed by the judge who tries the case. It is noticed that the Maine bill does not prevent the employment of other expert testimony outside the triers named by the court, if either party so desires, but it is perfectly plain that very little attention would

be paid by the jury to experts who were paid large sums to influence their opinions if they run contrary to the opinions of the triers appointed by the court. Of what good, then, would be the millionaire's millions?

WHY IS THE MEDICAL EXPERT DISCREDITED IN COURT?

THIS is the title of a paper by W. R. Allen, Judge of the Superior Court of North Carolina. While it is true that the medical expert is discredited at court, it is not the law that discredits him. It says distinctly that in speaking of matters within the domain of his profession and knowledge that his evidence should have peculiar weight with the jury. It is when speaking of matters not within his own knowledge and when he expresses an opinion based upon the evidence of others that he suffers most at the hands of the judge and jury, although he is not always safe when expressing an opinion based upon his own knowledge. Owing to the rapid growth of the knowledge of medicine, what is true today may not be true tomorrow, and thus the medical expert must make his statements with doubts and qualifications which add doubt to the minds of the jury. It is generally from the ignorant or unscrupulous that you may get the positive opinion. I am inclined to believe that the hypothetical question ought to be entirely abolished.

A judge and jury are not inclined, in worldly matters, to have much faith in those things they do not understand. The expert stands discredited unless he is understood. The remedy for the expert is simplicity of language and clearness of expression. An expert's opinion may be entirely theoretical, based on reading alone, and, strange to say, the books in his profession on which he relies may not be introduced to contradict him. The expert should be able to show practice and experience as well as theory. The remedy for this is in the medical profession, as they alone have the ability to know who among them are real experts. The medical expert is, strange to say, made judge of his own competency. The expert should be called by the court to be a witness.

THE SOLUTION OF THE MEDICAL EXPERT.

THIS question is still *sub judice*. He is tolerated and frequently dismissed without honor. The court should select experts to advise with him and the jury should be instructed in this same way. If the expert is judicious and skilful and has judgment and wisdom, his services will be valued highly and ought to be paid in the same manner. If he is incompetent the court will not be long in discovering the fact. Ridicule will drive the in-

competent, dishonest, one-sided witness from the court-room unless something is done soon to improve his standing. A few experiences like the one in the early part of the Thaw case will either elevate the expert witness or drive him into oblivion. The mistake on the part of the first unfortunate expert in the Thaw case was to allow himself to be drawn into the case so early. He should have refused to testify on the sanity of the defendant until he had heard all the testimony upon which he should base his opinion. No medical man should go on the stand to testify as an expert unless he is prepared to defend his opinion by his own personal experience, knowledge and observation.

An expert witness, if he expects to instruct the court and jury, should be educated and qualified at least in the specialty he represents. If incompetent and unworthy of his position, he should expect to be handled unmercifully. It is generally impossible for attorneys to understand a medical situation and to comprehend the necessity of framing questions which are rational, and calculated to bring out the point at issue. The attorneys answer that they are afraid of bringing out too much for fear that the opposition may profit, and thus the expert is handicapped, and the court and jury are so confused that they are glad to eliminate the expert testimony and decide for themselves. An expert witness may be able and competent but easily embarrassed, and therefore at the mercy of the attorney. The court, if appealed to, will always protect a witness from an unjust lawyer. The expert who is anxious to air his opinions and show his wisdom is always in danger of cross-fire and confusion. The stand an expert must take is for honesty and sincerity of purpose, a fairness to give the required information in both direct and crossexamination, and to be plain and concise in his statements and to be able to show that his opinion is backed by knowledge.

THE ATTITUDE OF THE MEDICAL EXPERT WITNESS TOWARDS COURT AND COUNSEL.

THERE have been reported instances where a medical man by his superior wit has brought confusion upon an impudent lawyer, but usually the trial of a lawsuit is a serious business, and it is better for the witness to take the matter seriously. In case the attorney in his examination exceeds what the witness thinks are reasonable bounds, the latter may control the situation by refusing to say anything till he has appealed to the court for protection. Most all judges are quick to protect a witness who has been unfairly dealt with. There is a great deal of nonsense about a witness being mixed up by a lawyer. An unsatisfactory exhibition that a witness may make on the stand is usually due to his

own ignorance or dishonesty. If he knows his subject and is trying to testify honestly, it is difficult to confuse a witness of ordinary coolness. If the medical witness observe these suggestions it will go far toward remedying the evils at present connected with expert testimony and to preserve, untarnished, the reputation of the physician himself.

EXPERT EVIDENCE.

THIS trite subject is receiving unusual attention of late. That great cosmopolitan bad smell, the Thaw trial, has renewed comment on this subject. Dr. Wiley who was first to take the stand, expresses his position best by his own plaintive plea during the grilling he received: "I came here as a witness of fact, and they have made me an expert without any preparation." The *Buffalo Medical Journal* says: "Dr. Wiley as a witness was an error; as an expert he was a gelatinous failure." Dr. Evans has invented the terms "brain storm" and "mental explosion," expressions which will probably stay with us and become additions to our rich vocabulary of slang. "Wileyism" is a term which has come to stay, and means something which is purely asinine.

EXPERT WITNESSES AND FEES.

IN Toronto, according to the *Canadian Journal of Medicine and Surgery*, we have in the case of a recent telephone girls' strike a quota of medical practitioners summoned by the counsel on each side to give testimony on such points as to whether eight hours were too much for the average operator to work. Of course, diverse opinions were readily obtained. The counsel for the girls took the ground that the physicians summoned were entitled to collect only the usual \$4.00 per diem allowed medical witnesses in Canada, and not an expert fee. This brings up the old question: What is a physician entitled to for attendance in court? This depends largely upon the character of the evidence he is required to give. Four dollars per day is surely insufficient. What would be the average lawyer's fee for such service? Allowing that this is a fair fee, it is entirely different if the medical man is to give expert testimony. An ordinary witness must only state facts; but when he is called upon to give an opinion as to matter depending on special knowledge he has a right to be paid accordingly. Courts have ruled very differently on the subject of expert fees. Some have ruled that the expert is not only a compellable witness, but can only claim the ordinary fees. Judge Morson, of Toronto, on the other hand, gave judgment for two Toronto physicians who sued for expert fees of \$50.00 each per

day, giving it as his opinion that an expert, if an expert, was entitled to collect a reasonable sum for his fee.

Let the profession stand up and fight for some reasonable remuneration, say five dollars per hour, and all stand together, and we will get it. Alfred Swayne Taylor once said that no man had a right to enter the expert witness-box unless he knew all about the subject under discussion. That is too sweeping a definition of an expert.

EXPERT MEDICAL TESTIMONY.

THIS was the subject of the presidential address before the Medical Association of Central New York, by Dr. David M. Totman. The doctor said that he had been advised by one of his friends, a most learned member of the bar, that there was neither honor, glory nor anything else to be gotten out of a medico-legal case, but to get one's name smirched and dishonored. The conditions which surround the giving of expert testimony in our courts are well-nigh intolerable, considering the attitude of the public press, the insulting innuendos of graft, and the charges of open perjury committed by medical men on the stand. He saw no relief under the present system of jury trial. It will take centuries of education and evolution for the average jury to understand much expert testimony, so, no difference how perfect the expert testimony given the jury, the verdict will not be influenced one whit. Even the learned judges are not always able to appreciate the bearings of expert medical testimony. He holds that hysteria is a subject of such a nature that neither judge nor jury, however learned, may be able to execute justice when such a subject is under consideration. No man can pass upon the value of expert testimony in its entirety unless he has had fifteen or twenty years of study, observation and management of hysteria. The appellate courts should be given the power by legislation to name a board of three members for each appellate division of properly qualified physicians of fifteen or twenty years' experience, whose proper office and duty would be to consider all medico-legal cases, under the jurisdiction of the appellate court, as advisors to the court. In some way there should be established a proper review on the medico-legal evidence, which he is free to say does not obtain at the present time. This would be a death blow to ambulance chasers. Shrewd lawyers have profited for years from the fact that medico-legal evidence has been measured by bulk and not by quality.

Such examples as one of the experts in the Thaw trial rebound greatly to the discredit of the medical profession. The profession is filled with thoroughly competent men who could

render good account of themselves as experts in whatsoever line they may be engaged, and it is very unfortunate that in a case so conspicuous as that of the present instance the mistake should have been made of bringing to the witness-stand one so capable of holding the profession up to ridicule. The random selection of medical experts should be discontinued. Inquiry among the practitioners of one's own city will generally give an insight into one's real capacity. How often have we seen mistakes made in the selection of medical experts as well as the selection of physicians of consultants by the laity! No one knows a medical man's capacity so well as his colleagues.

NON-PARTISAN EXPERTS.

DR. HALDOR SNEVE, of St. Paul, in the *St. Paul Medical Journal* for April, 1907, reports the following case of interest:

A woman was caught by a guy wire which had been built by the patient's brother and other relatives and sold to a large telephone corporation. Two non-partisan lady physicians were appointed by the court to examine the patient. They testified that they found no physical signs whatever of adhesions or any trouble with the lungs or any difficulty discoverable in the back part of the head, both of which the patient claimed. They said the patient complained of pain on pressure over the occiput and under the right clavicle. The jury awarded \$2,000 damages. In other words, in spite of the negative testimony of two non-partisan physicians, the jury awarded damages too large to be merely punitive for having a guy wire on the public highway. He found the judge's action a step in the right direction, but thinks that if a jury of doctors appointed by the court could examine the patient, listen to the testimony and then testify without having any other medical testimony, that would come nearer the goal. The writer thought that all questions as to amount and character of physical injury should be passed on by a medical and not a lay jury. The jury should pass on the facts of the case, and the judge, after the testimony of the medical jury, should award the damage, if any.

SUGGESTIONS TO THE MEDICAL WITNESS.

THIS is the subject of a paper by Surgeon-Major Wrafter (retired) in *Practical Medicine*, Delhi, India. An expert witness should bear in mind that he is not assisting the administration of justice if he presents a partial statement of the facts, and he should be conservative in his statements. One's confidence in the medical profession is impaired when he sees medical men go on the stand and give positive and decisive answers to ques-

tions which he knows can only be answered doubtfully. The medical witness frequently has an overpowering desire to know all. The direct answer, "I don't know," is often the best evidence of the superior intelligence of the medical witness. In the sickroom the physician is the ultimate authority, and it is sometimes better that he should make a mistake than that he should vacillate or waver. On the witness-stand the situation is different. If the witness, before undertaking to give an answer, would insist upon understanding the question thoroughly he would in many cases, if he gave his honest deliberate opinion, answer that the question was absurd and he could not answer it. If this is true, that is just the kind of an answer which should be given. Furthermore, it is practically impossible for the medical man who knows anything about the case in hand to eliminate from his consideration, when he answers a hypothetical question, matters which are not included in the question, yet the law presumes that, in answering a hypothetical question, the witness is assuming only the facts that are stated in the question. This tendency to answer a different question from the one put to the witness is a fruitful source of controversy.

A FEW REMARKS ON MEDICAL EXPERT TESTIMONY.

GEORGE FRANKLIN SHIELS (*Medical Record*) considers this subject under various headings. He believes that expert medical evidence could be of the greatest value in upholding justice if it were properly introduced. He suggests two plans. (1). Let the attorneys of each side select two experts, and let the four thus chosen choose a fifth. These five men could, after mature deliberation, present a full and useful report on any technical points considered by them; or (2) the matter could be left in the hands of the court, who could call one or a dozen medical men to elucidate without prejudice any technical points that might arise in the trial. The writer favors the plan in which the court has control.

BOARDS OF EXPERTS.

JUDGE ALLEN, in his paper, gives "into the hands of the medical profession the power of naming the board of experts to the judge," while Dr. Totman would place this power entirely in the hands of the judge himself. Judge Allen was, indeed, quite emphatic on this point, claiming that the profession knew the standing of its members and the capability of each for a place on such a board, and as the profession was, as a whole, to a large extent interested in expert testimony, it ought to say whom it will have to represent it. Both suggestions are from eminent

authorities, one from the side of the law and the other from that of medicine, and both have some strong points to recommend them. Either would be acceptable if it would remove the odium now attached to expert testimony before the courts.

There is a movement on foot in Kentucky outlining steps to be taken that whenever there is a question up in court where the truth can only be arrived at as the result of a competitive medical opinion the latter question would be referred to a board of three or five men from the medical profession, selected by the presiding judge, these men not to be approached by the lawyers on either side or allowed to testify in court at all. Let these men have the facts all placed before them; let them examine the prisoner or plaintiff as the case may be, and let them submit a signed and sworn-to statement of their findings and opinions which should be read to the jury; the compensation of the medical board to be included in the costs of the case.

THE HYPOTHETICAL QUESTION.

THE literally lettered editor of the *St. Louis Medical Review* discusses the above subject thus ably:

"It is time that some limitation was placed to that double distilled essence of tomfoolery, the so-called 'hypothetical question' put to expert witnesses in courts of law. Its ostensible object is to lay before the witness in abstract form certain conditions supposed to have existed in the concrete case before the court, so that the judgment of the expert may be obtained on the material facts requiring expert opinion involved, released from all complicating extraneous circumstances that might confuse the issue or call bias into play. Its practical effect is more often to obscure the main scientific issue by the cuttle-fish expedient of 'ink slinging,' in the production of mases of verbosity that by comparison reduced the involved sentences of Livy to a laconic staccato. When a certain counsel in a present *cause celebre* is allowed, as the press reports state, to occupy one hour and eighteen minutes in reading one such 'hypothetical question,' the details of which it is impossible for any man living to carry in his head, it is safe to assert that the elucidation of truth is the last thing he had in view. No hypothetical question should be allowed to be of greater length than a majority of the jury, being ordinarily intelligent persons, could repeat by heart after having it two or three times read to them. If the subject cannot be compressed within that length then the question is useless and can under no circumstances be an aid in the elucidation of truth, consequently it should be rejected."

A very interesting paper on the subject of the medical expert witness from the facile pen of Dr. A. N. Ellis, of Maysville, Ky., may be found in *The Lancet-Clinic* of July 14, 1906.

THE BUSINESS END OF IT.

THE following irreverent expression is from the *Baltimore American*: "This," said the expert, as he looked fondly at the amount placed in his hands for his portion of the testimony, "is the kind of lunacy commission I favor."

TOPICS OF PUBLIC INTEREST.

What to Eat.

Some People Need Meat, but Most People Eat Too Much of it.

[*New York Tribune*, May 12, 1907.]

RECENTLY Professor Irving Fisher, of Yale University, made a series of endurance tests on forty-nine persons, representing two contrasted types of dietetic habits. It was generally reported in the press that as a result of these experiments it had been shown that vegetarians had much greater endurance than flesh eaters. This was seized upon as a victory for vegetarianism. Professor Fisher has more recently given an account of the experiments and the results, in which he suggests that the distinction should be made between high and low proteid dietaries rather than between those of vegetables and flesh. A vegetable diet is not necessarily a low proteid diet, as there are vegetables which are rich in proteids. The report of the investigation also gave no evidence that a strictly vegetarian diet was necessary in order to reach the maximum endurance. The experiments suggested that a diet of low proteid character resulted in a greater degree of endurance. Foodstuffs are divided into heat producers and tissue builders, the proteids constituting the latter.

The experiment was a part of a series of studies Professor Fisher is making on the subject of endurance from the point of view of an economist, seeking to discover what conditions favor the labor power of nations. In his studies he has pointed out that strength and endurance are not the same, the strength of a muscle being measured by the utmost force it can exert once, while its endurance is measured by the number of times it can repeat a given exertion within its strength.

The subjects of the experiment were of three classes—athletes accustomed to a high proteid and full flesh dietary,

athletes accustomed to a low proteid and non-flesh dietary and sedentary persons, who lived upon food of a low proteid and non-flesh character. They consisted of Yale instructors and students, a Connecticut physician, and some of the physicians, nurses and employes of a well known vegetarian sanatorium. The personnel of the sanatorium was selected as representing abstainers from flesh foods. All of these subjects except one had abstained from meat for periods of from four to twenty years, and five of them had never eaten such food. The exception had abstained for two years only.

Two comparisons were planned, one between flesh eating athletes and flesh abstaining athletes and the other between flesh eating athletes and flesh abstaining sedentary workers. The pitting of the sedentary workers against the athletes was a handicap placed upon the "abstainers" intentionally, in order to give them a more severe and decisive test in case the first comparison between the picked athletes of both classes should turn out in their favor.

Three simple endurance tests were employed. First, the arms were held horizontally as long as possible. The second was deep knee bending and the third leg raising with the subject lying on his back. The tests were made before witnesses.

In the arm holding contest the flesh abstainers showed great superiority. Even the maximum record of the lovers of the flesh-pots was barely more than half the average for the abstainers. Only two of the fifteen flesh eaters succeeded in holding their arms out over a quarter of an hour, while twenty-two of the thirty-two of the other class surpassed that limit. None of the flesh eaters reached half an hour, but fifteen of the thirty-two abstainers exceeded that limit. Nine of them exceeded an hour; four, two hours, and one, three hours.

In respect to deep knee bending only one of the nine flesh lovers reached 1,000, as against six of the twenty-one abstainers. None of the former surpassed 2,000, as against two of the latter.

The records for leg raising showed little difference. None of the contestants reached their absolute limits. The highest record for the abstainers was 1,000 times.

The average records for each of the three classes were as follows:

Arm holding, athletic flesh eaters, 16 minutes; flesh abstainers, 31 minutes; sedentary abstainers, 62 minutes.

Deep knee bending—athletic flesh eaters, 576 times; flesh abstainers, 933 times, and sedentary abstainers, 535 times.

Professor Fisher shows why these differences could not be due to exercise, sleep or leisure on the part of the abstainers,

physique or fresh air. He concludes, therefore, that the difference in endurance must be due to the diet. From examination he found that the contrast in the groups in respect to flesh was closely associated with the contrast in respect to the amount of proteid in the subjects. This examination showed that the diet of the latter was low in proteid as compared with the ordinary American diet.

Regarding the experiment Professor Fisher says:

"Of the three groups compared, the large flesh eaters showed far less endurance than the abstainers, even when the latter were leading a sedentary life. With stronger reason must the large flesh eaters of the sedentary type be inferior in endurance to abstainers. In view of the great superiority shown, the heavy handicap imposed upon the abstainers and the absence of known factors to account for their superiority, it is improbable that this superiority can be explained away by adventitious circumstances. It is possible that the superiority of the abstainers is due to the absence of flesh foods or to the use of a smaller amount of proteid, or to both, as well as to the abstention from tea, coffee and condiments.

"No attempt has been made to explain why the use of high proteid or flesh food should diminish endurance. A number of theories have been proposed. Dr. Alexander Haig, of London, has long maintained that abstainers have greater endurance than flesh eaters, particularly if they abstain also from other 'uric acid producing foods,' such as (he says) eggs, beans, peas, asparagus and mushrooms. His principal theory is that uric acid is the factor in diet which induces fatigue. Many of his theories, both as to uric acid and as to the requirements of proteid, have been overthrown, but his claims for the advantages of a purin-free—or, at any rate, a fleshless—dietary have received much corroboration. The manner in which, according to Haig, uric acid interferes with endurance is by making the blood 'collemic' or viscous, whereby it becomes difficult for the heart to pump it through the capillaries. Hence the blood pressure increases. Observations actually show that persons possessing great endurance often have low blood pressure. This is true, for instance, among the subjects of the present experiment at the sanatorium.

"A more general theory than that of Haig is that flesh foods contain in themselves 'fatigue poisons' of various kinds, which naturally aggravate the action of the fatigue poisons produced in the body.

"Still another theory in favor of the use of low proteid is that mentioned by Professor Chittenden in his 'Physiological

Economy in Nutrition,' and concerns the metabolism of proteid. As is well known, fat and carbohydrate, when consumed, give off merely carbonic acid gas and water, both of which are easily eliminated, the one being a gas and the other a liquid. Proteid, on the other hand, produces crystalline waste products, of which uric acid is one. The theory is that these midway products of metabolism in some manner produce fatigue. When the problem of the physiology of fatigue and its relations to food ingested is more fully solved, it will not only satisfy a legitimate scientific curiosity, but will point unmistakably to the optimum diet under various conditions. In the mean time it may be said that, whatever the explanation, there is strong evidence that a low proteid, non-flesh dietary is conducive to endurance.

"The truth of this result has been long obscured through two unfortunate circumstances. One is the vegetarian fanaticism, mentioned by Caspari, which has done much to defeat its own ends. From the premise, often bolstered up by theological dogma, that flesh eating is wrong, the inference is drawn that it must be unhygienic. This reasoning is so utterly at variance with the methods of modern science as to stamp those who use it as victims of bigoted prejudice, and to prevent any genuine scientific investigation. At present the tendency of such investigations as those of Chittenden, Mendel, Folin, Metchnikoff, Caspari, Le Fevre, Fauvel and others have a distinct trend toward a fleshless dietary. And yet such are the associations of the term 'vegetarian' that many are loath to grant even what is due to the tenets of 'vegetarianism.' The proper scientific attitude is to study the question of meat eating in precisely the same manner as one would study the question of bread eating.

"The second circumstance which has obscured the merits of a low proteid and non-flesh diet is that many of those who have attempted experimentally to give up flesh foods have made themselves ill. The reason formerly given for this effect was 'deficiency of proteid,' but in view of the researches of Pawlow and other recent writers we may be fairly certain that such failures are usually due to the fact that meat is a highly peptogenic food. It follows that when it is suddenly or forcibly cut out of one's diet the stomach feels the lack of its accustomed stimulus. There seem to be practical advantages in the method of reaching a low proteid diet adopted by Mr. Fletcher, consisting of thorough mastication. The experiment last year at Yale, as well as other experiments, have shown that adherence to this practice leads to a gradual reduction in proteid and flesh foods without any unpleasant or dangerous self-denial on the part of the experimenter. It may well be that those who, in spite of thorough mastication, still have a craving for flesh foods, have an actual

physiological need which no other foods—at least in the list of foods employed by them—is able to satisfy. The question of the extent to which flesh foods may be used advantageously is still open, but there can now be little question, in view of the facts which have come to light during the last few years, that the ordinary consumption of those foods is excessive.”

A METHOD OF REDUCING OLD COLLES'S FRACTURES: STIFFNESS FOLLOWING APPARENT CONTUSIONS OF THE ELBOW JOINT.—Clarence A. McWilliams considers the possibility of improving the position of the fragments in cases of Colles's fractures which have gone for some time unrecognised, and have become consolidated in bad position. In some cases disability is slight and it is better to let things alone. In others it seems necessary to do something to improve matters. The author uses for refracturing the bones a large engineer's monkey wrench with the blades well padded. This is used to immobilize the upper fragment, resting against the projecting edge of the lower fragment. Thus a fracture in the line of the original injury may be produced with the expenditure of very little force. There is no strain on the structures of the wrist, and the injury to the tendons is very slight. Traumata at the elbow joint, which are treated for sprains sometimes develop stiffness later, on account of the formation of new bone within the joint, as a result of a fragment of periosteum getting into the joint and producing bone, which is so placed as to be between the ends of the bones. Usually forced persistent passive motions will crowd away the fragment of bone to the side of the joint so that it does not interfere with motion.—*Medical Record*, May 25, 1907.

TREATMENT OF FRACTURES.—In the 1907 edition of his well-known Surgical Year Book (*Practical Medicine Series*), Prof. J. B. Murphy has the following to say concerning fractures and their treatment:

“Fractures have been too much neglected in the modern surgical amphitheater and text-books, and the percentage of bad results is proportionately increasing: imperfect reduction, improperly applied splints and casts, and prolonged immobilisation still produce their pernicious sequelæ.”—*Railway Surg. Jour.*

USE OF PILOCARPINE FOR THE RELIEF OF PRURITUS VULVAE.—John J. Reid says that the value of pilocarpine in the treatment of pruritus vulvæ and other forms of this affection has not received the recognition it deserves. The pilocarpine is to be used for this purpose in doses of from one-eighth to one-quarter grain.—*Medical Record*, May 25, 1907.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 238 DELAWARE AVE., BUFFALO, N. Y

VOL. LXII.

JUNE, 1907.

NO. II

The Chicago Conference on Medical Education.

THE third annual conference of the Council on Medical Education of the American Medical Association was held at Chicago, April 29, 1907. A large number of persons interested in medical education from all parts of the country was present. In addition to the six members of the council eighty-four delegates were in attendance representing twenty-two state medical examining boards, eight state medical societies, the three branches of the government service, three college associations, and seven colleges of liberal arts. The entire conference, which lasted until near 6 o'clock p.m., was one of unusual interest and reflects credit not only upon the council itself, but upon all who have contributed by pen or speech to a betterment of medical education on the lines laid down by the council.

One of the most important and far reaching measures adopted by the conference is the inspection of the medical colleges in the United States. This inspection was voted at last year's meeting and the chairman, Dr. Bevan, in his address gave a synopsis of the inspection report, which disclosed an astonishing condition of affairs among the medical schools of the country. It is surprising after all the warnings given that so many colleges should lag behind in the march toward higher ideals.

Dr. Bevan's report disclosed the fact that nearly one-half of the medical schools in the United States fell below 70%, that being the minimum marking of acceptability. In other words, of the 160 schools in the United States 81 were above 70%; 47 were between 50% and 70%, while 32 were below 50%. Schools graded above 70% are considered as worthy of recognition.

The basis of the inspection marking was that adopted by the civil service and the grading was obtained under the following general heads:

1. Failures of graduates before State Examining Boards.
2. Evidence of a satisfactory preliminary requirement.
3. Character and extent of the college curriculum.
4. Number, condition, and utility of college buildings.
5. Laboratory facilities and instruction.
6. Dispensary facilities and instruction.
7. Hospital facilities and instruction.
8. Extent to which laboratories are officered by men devoting their entire time to teaching and research.
9. Extent to which the school is conducted for profit directly or indirectly rather than for teaching.
10. Medical library, museum, stereopticons, charts, etc.

The fairness of the inspection cannot be questioned. The markings in each instance are liberal and the classifying of the colleges has been a matter of great deliberation. Chairman Bevan, in his address, pointed out the following facts as shown by the inspection:

1. Of the 160 schools, 81 received markings above 70, 47 markings between 50 and 70, 32 below 50.
2. It was clearly shown by this inspection that medical schools conducted solely for profit are a menace and should not be recognised.
3. Night schools attempting to educate a student in the hours from 7 to 10 p.m., usually after the student has devoted his day to some occupation in which he earns his living, should not be recognised by any state board, especially when it is found in the good schools that four years of nine months six days in the week from 8 a.m. to 5 p.m., is barely sufficient time to devote to a medical course.
4. Many schools are conducted for the purpose of preparing a student to pass a state board examination and not with the object of making him a competent practitioner.
5. A student can be prepared in a quiz class in a comparatively short course to pass a written examination before a state board and yet be absolutely ignorant of laboratory work, dispensary or hospital work, and utterly incompetent to begin the practice of medicine. This fact shows the necessity of inspecting the schools as to the actual character of their work, of making the written examination very practical and of including a practical examination in the laboratory and possibly later on patients in the state board examination for licensure.

6. The most important fact brought out in this inspection is this: In this country we need money for medical

education. It costs more to educate a medical student than he can pay in the way of fees. Medical education must secure state aid and private endowment.

7. Every state university now in existence or established later should have a strong, liberally supported medical department. No better investment can be made by any state than the establishment and support of such a medical department. Such a department, at least the clinical years, should be in the largest center of population in the state, and in close touch with the various departments of the state board of health.

8. The public must be taught the necessities and the possibilities of modern medicine, and philanthropists shown that medicine well deserves the same support that has been given to theology, to colleges of liberal arts, to libraries, etc. Philanthropists will not endow medical schools which are private corporations and conducted for profit. Such schools should change their organisations so that they can ask for and secure necessary endowments.

9. It is in the power of the state boards and the organised profession to place American medicine on an acceptable plane.

10. Already about 50 schools have agreed to require, by 1910 or before, one year of university physics, chemistry and biology, and one language as a preliminary education before matriculating in medicine.

11. It is necessary to agree on a standard of what shall constitute a medical college in good standing. If, as a result of this conference, the delegates from the state boards agree to require within a reasonable time the following standard of our medical schools, we should soon place ourselves on a plane equal to that of any country in the world:

(a) Preliminary education sufficient to enter the freshman class of our universities plus, after a date to be agreed on, one year of physics, chemistry and biology and one modern language. This preliminary education to be passed on by an officer selected by the state licensing board.

(b) Two years of study, largely laboratory work in anatomy, physiology, pharmacology and pathology in well equipped laboratories, officered by trained men devoting their time to those subjects.

(c) Two years of clinical work largely in dispensaries and hospitals, the dispensary material in the proportion of at least 10,000 per year for 100 students in the senior class and the hospital in proportion to a daily average of 200 patients to 100 students in the senior class.

(d) The curriculum and character of both laboratory and clinical work to be satisfactory to the state licensing board, which shall inspect the same each year.

The state medical examining boards were recognised by the conference, not only through the reports of the chairman and secretary, but in the debates that took place on these reports and on the other papers read, as the only legally constituted authority to deal with the questions involved, the function of all other bodies including the council itself, being merely advisory in character. It, therefore, behooves the state boards to take up these questions in all seriousness and to cooperate with the council in this most important, even vital matter. In order that efficiency may be maintained and success reached with reasonable promptitude it is essential that the present personnel of the conference shall continue intact, as far as possible. The representation from states and institutions not now in affiliation with it is of the greatest importance, and this should be urged by every consideration looking toward safeguarding the interests involved

Summer Beverages.

WITH the approach of warm weather the inhabitants of a large city are brought to face the question of proper drinks with which to meet the unusual demand made upon the excretory functions of the body. The exhalations by the skin are more than doubled during the summer season and this excess must be met by an intake of fluid at once adequate and uninjurious.

The average householder naturally will secure an appropriate supply of "soft drinks" with which to quench the thirst of inmates and visitors. It used to be the fashion to serve lager beer when occasion required, but since it is believed that this product of the brewery contributes to the causation of certain kidney affections, this practice has been done away with to a great extent. The introduction of ginger ale, too, has served in a measure to push beer to one side. The manufacture of ginger ale in this country has increased of late to an enormous extent, and this has consequently cheapened the price of the product to a corresponding degree. It must not be forgotten, however, that the quality of the article has suffered as a result.

We advise our readers to shun the product of an unknown manufacturer of ginger ale, because there is no assurance that the quality from such sources is what it should be. If, however, the ginger ale manufactured by the Hudor Company, of Buffalo, is selected there need be no question about the high quality of the beverage. We have taken some pains to inform ourselves on this subject and believe the formula and method of manufacture of ginger ale by the Hudor Company, are on the very

highest plane. It is difficult to see how these essentials could be improved upon with the present knowledge relating to the manufacture of ginger ale.

The Hudor Company also manufactures a "Brewed Ginger Beer" which is most attractive to the palate as well as free from any objectionable elements. In a very hot day this beverage appeals to many in preference to ginger ale. At all events, it is a palatable, harmless, and refreshing drink that may be taken at any and all times with confidence in its purity and high quality. The prices, too, of these refreshing beverages, ginger ale and brewed ginger beer, are quite within the reach of the modest pocketbook.

In the issue of this JOURNAL for May we discussed the question of distilled water as a substitute for all other drinking waters in the present state of the Buffalo water supply. We regard the ozonised distilled water, manufactured by the Hudor Company, as the most palatable and best drinking water for sick or well persons within the reach of the inhabitants of Buffalo.

THE new medical bill regulating the practice of medicine in the state of New York was signed by Governor Hughes May 13, 1907, and took effect immediately thereafter. It creates a new definition of the practice of medicine, substitutes one board of medical examiners of nine members for the three boards of seven members each, representing the several state medical societies, and recognises osteopathy as a system of treatment. The definition of the practice of medicine in the law reads as follows:

A person practises medicine within the meaning of this act, except as hereinafter stated, who holds himself out as being able to diagnose, treat, operate or prescribe for any human disease, pain, injury, deformity or physical condition, and who shall either offer or undertake, by any means or method, to diagnose, treat, operate or prescribe for any human disease, pain, injury, deformity or physical condition.

A special meeting of the Regents of the University of the State of New York is called to assemble at the capitol at Albany, May 29, 1907, for the purpose of making appointments to fill the various positions created by the new law.

THE next meeting of the Board of Medical Examiners for the state of Texas (regular) for examination will be held at Austin, June 25, 26 and 27, 1907. This examination will be held in accordance with the old medical law of Texas and will be the last meeting of this board for examination, as the new medical law of Texas, *the one board bill*, becomes effective July 13, and under

the provisions of this law applicants will only be permitted to appear for examination who are graduates from medical colleges of not less than four terms of five months each.

THERE are now forty thousand automobiles registered in New York state says the *Tribune*. The time is ripe for a lightning calculator to give us statistics regarding the daily number of sudden jumps by pedestrians, swear words by chaffeurs, jokes by automobile humorists and shattered bank accounts that this figure implies.

BEDOUINS in Africa (*The Tribune*) have a rough and ready method of attempting to cure the fever caused by the wounds they have inflicted on those they have captured for sale as slaves. Ice baths being impossible, the patients are buried up to their necks, in the hope that the cool sand will allay the fever. They remain so buried for several days, until they have been killed or cured. Eighty per cent. succumb to the treatment.

A PEACE envoy who does not dare to set foot in the very land which most needs the preaching of peace is certainly handicapped in his mission.—*The Tribune*.

THE finding of a lost manuscript of an epic poem by Ibsen almost puts the Norwegian into the company of the classic authors.—*The Tribune*.

PERSONAL.

DR. ALBERT VANDER VEER, of Albany, professor of clinical and abdominal surgery in Albany Medical College, regent of the University of the State of New York, was tendered a dinner at the Hotel Ten Eyck, Albany, May 2, 1907, by more than one hundred of his former pupils. The chief speakers were Dr. Joseph D. Bryant and Dr. Thomas H. Willard, of New York; Dr. Frederic C. Curtis, Dr. Thomas Wilson and Dr. Samuel B. Ward, of Albany. Dr. Willard was the chief organiser of the banquet.

DR. BENJAMIN H. GROVE, of Buffalo, will spend the months of July and August in European travel. Dr. Grove is one of the leading ophthalmologists in this city and has earned the pleasant vacation which he contemplates.

DR. H. Y. GRANT, of Buffalo, who has practised ophthalmology in this city for some years, is about to sail for Europe, accom-

panied by Mrs. Grant, and will remain abroad for a number of months. Dr. Grant is a son of Sir James A. Grant, of Ottawa, whose distinguished place in medicine has brought him the honors of knighthood.

DR. JOHN CHALMERS, of Buffalo, has removed his offices and residence from 321 West Ferry street to 328 West Ferry street. Hours: 8 to 9; 2 to 3, and 7 to 8. Sundays, 1 to 3. Telephone, North 3712.

DR. JAMES A. MACLEOD, of Buffalo, has removed his offices from 482 Delaware Avenue to the Hotel Touraine Annex, 262 Delaware Avenue. He will continue to reside at the Hotel Touraine. Hours: 1 to 3, and by appointment.

DR. JOHN J. TWOHEY, of Buffalo, announces the removal of his offices and residence from 2200 Main Street to 2148 Main street. Telephone, Park 121.

DR. F. FOLLONSBEE, of this city, has been appointed house surgeon at Riverside Hospital to serve one year from May 1, 1907.

DR. WILLIAM H. WATSON, of Utica, formerly a regent of the University of the state of New York, has been elected an honorary member of the Russian Surgical Society, which celebrated its twenty-fifth anniversary May 9, 1907.

DR. NICHOLAS SENN, of Chicago, was elected to honorary fellowship in the Russian Surgical Society, which recently celebrated its twenty-fifth anniversary at St. Petersburg.

DR. WILLIAM HOUSE, formerly of Buffalo, announces to the physicians of the Pacific Northwest that, after three and one-half years spent as resident physician at Crystal Springs Sanitarium, Portland, Oregon, he has retired from that institution and has taken offices at 313-314 Oregonian Building, Portland, Oregon. Dr. House will devote special attention to diseases of the brain and nervous system to which he has given seven years exclusively as resident physician in various institutions.

DR. E. C. DUDLEY of Chicago, has removed his offices to room 116, Reliance building, southwest corner of State and Washington streets. Consultation hours, twelve to one and two to three P.M. House address, 1619 Indiana avenue.

OBITUARY.

DR. ANDREW THOMAS DUNN, of North Augusta, Ontario, died at his home January 16, 1907, after an illness lasting several years. He graduated at the Medical Department, University of Buffalo, in 1863, and at the Royal College of Physicians and Surgeons, Kingston, Ontario, in 1864.

DR. CHARLES M. KELLOGG, of Rochester, N. Y., died at his home March 29, 1907, aged 61 years. He graduated at the Medical Department, University of Buffalo, in 1884.

DR. H. W. CARPENTER, of Oneida, N. Y., died at his home in that city May 19, 1907. He graduated at the Medical Department, New York University, in 1858. He had served as member of assembly and as coroner of Madison County.

MR. JOHN WYETH, the head of the firm of John Wyeth and Brother so well known to the medical profession as manufacturing chemists and pharmacists for forty years or more, died at Philadelphia, March 30, 1907. Mr. Wyeth was a gentleman of culture, a scholarly man, genial and companionable, and will be missed by hosts of friends throughout the country.

SOCIETY MEETINGS.

THE American Medical Association will hold its sixtieth annual meeting at Atlantic City, June 4-7, 1907. The indications are that this will be more numerously attended than any previous meeting of the association. The president, Dr. William J. Mayo, of Rochester, Minn., will open the meeting at 11 a.m. Tuesday, and among other duties will introduce the president-elect, Dr. Joseph D. Bryant, of New York, and then retire from office.

THE ROCHESTER ACADEMY OF MEDICINE held meetings during the month of May as follows:

Section on Obstetrics, Gynecology, and Pediatrics.—Friday, May 3, 1907, at 8:15 P.M. Program: Should cholecystitis or cholelithiasis be any longer considered medical affections, and what are the usual consequences of so treating them? Charles B. G. DeNancrede, Professor of Surgery, University of Michigan, Ann Arbor.

The regular quarterly meeting was held Wednesday, May 15, 1907, at 8:15 P.M. Program: Some phases of the cancer problem. William Seaman Bainbridge, New York.

THE BUFFALO ACADEMY OF MEDICINE held meetings during the month of May as follows:

Section on Surgery.—Tuesday, May 7, 1907, at 8:30 P.M. Program: (a) Urethral stricture, William C. Phelps; (b) How often are vesical calculi overloaded? With a report of ten cases, James A. Gardner. Election of officers of the section.

Section on Pathology.—Tuesday, May 21, 1907, at 8:30 P.M. Program: (a) Recent study of neurofibrils, (b) Degeneration of posterior columns in the spinal cord. Illustrated with lantern slides. Charles I. Lambert, of the Pathological Institute for the New York State Hospital, New York city. Election of officers of the section.

Section on Medicine.—Tuesday, May 14, 1907, at 8:30 P.M. Program: Symposium on hereditary syphilis: (a) Etiology and general pathology, N. G. Russell; (b) General course and symptoms, Albert T. Lytle; (c) Nose, throat and ear manifestations, George F. Cott; (d) Eye manifestations, Arthur G. Bennett; (e) Skin manifestations, Grover W. Wende. These papers will be illustrated by stereopticon views. Election of officers of the section.

THE MEDICAL SOCIETY OF THE COUNTY OF STEUBEN held its regular annual meeting at Bath, May 15, 1907, at which the following named officers were elected for the ensuing year: president, Herbert B. Smith, of Corning; vice-president, F. H. Coyle, of Hornell; secretary, W. W. Smith, of Avoca. Drs. Carpenter of Corning, Wakeman of Hornell, and Ainsworth of Addison were appointed as a committee to confer with the Steuben county board of supervisors relative to the appointment of a county bacteriologist.

THE NIAGARA FALLS ACADEMY OF MEDICINE held its annual meeting at the home of Dr. J. A. Lanigan, May 20, 1907. Resolutions upon the death of two members of the academy, Dr. W. A. Campbell and Dr. O. E. McCarty, were read and adopted. The election of officers resulted as follows: President, R. H. Wixon; vice-president, J. A. Lanigan; secretary and treasurer, E. B. Horton; trustee, E. P. H. Griswold. Dr. E. M. Dooley of Buffalo read the paper of the evening.

COLLEGE AND HOSPITAL NOTES.

THE FORDHAM HOSPITAL at Pelham road and Southern boulevard, Borough of the Bronx, New York, recently dedicated its new buildings.

One is a five story structure and faces Bronx Park, in which are six wards. The first floor is devoted to children. The nurses' home is in the rear of the hospital.

Dr. John W. Brannan, president of the board of trustees, was master of ceremonies. Brief addresses were made by Dr. Thomas Darlington, president of the Department of Health; the Rev. Daniel Quinn, president of Fordham University; Patrick F. McGowan, president of the Board of Aldermen, and Justice John M. Tierney, of the Municipal Court.

A SUMMER SCHOOL will be held at Syracuse University for six weeks, July 5 to August 16, 1907. This school is designed to accommodate (1) teachers of elementary and secondary schools; (2) students who may desire to review college preparatory work; or (3) to prepare for state preliminary examinations; (4) students desiring to do college work during the summer. Credit will be given for work under (4).

Libraries and laboratories will be open and available. Tuition for two or more courses, \$25, for one course, \$15. Thoroughly competent men will give the instruction. Courses will be offered in Greek, Latin, German, French, Spanish, Public Speaking, Philosophy, English, History, Political Economy, Sociology, Mathematics, Physics, Chemistry, Biology, and in other subjects if arranged for in advance. For circular and information address The Registrar, Syracuse University.

THE JACKSON HEALTH RESORT training school at Dansville, held its graduation exercises for nurses May 14, 1907. Nine nurses graduated and the address to the class was delivered by Dr. William P. Spratling, superintendent of the Craig Colony at Sonyea.

AN EMERGENCY HOSPITAL was established at the Actors' Fair, recently held at the Metropolitan Opera House, New York. The hospital registry recorded nearly 200 patients cared for during the fair.

The idea was conceived by Mrs. A. M. Palmer, one of the managers of the fair, and carried out by Dr. Jessie T. Bogle, who had charge of the undertaking.

Dr. Bogle was assisted by an able corps of physicians, one or more of whom were in constant attendance during the progress of the fair, and also by the Post-Graduate Hospital, the latter having rendered invaluable aid by furnishing the ward in the most approved manner, and also the nurses, three of whom were always on duty.

The hospital was fully equipped with everything that would possibly be needed in treating cases of sudden illness or accidents of every kind.

THE ALUMNI ASSOCIATION, of the Medical Department, University of Buffalo, will hold its thirty-second annual meeting May 28, 29, 30 and 31, 1907. Although this issue of the JOURNAL will hardly reach many of the alumni before the meeting is well under way, we yet publish this official program to give it permanent record, as a tribute to the old University, to the executive committee and to all who have contributed to make commencement week so interesting in celebration of the sixty-second anniversary of the grand old college.

TUESDAY, MAY 28.

8.00 P.M.—The exercises will begin with a reception in the college building, by the faculty of the department, and the association will transact routine business and elect officers, and the classes '47, '57, '67, '77, '82, '87 and '97 will be received by the faculty and officers of the association.

9.00 P.M.—The executive committee is pleased to announce that Honorable Charles P. Norton, Vice Chancellor of the University of Buffalo has consented to tell the association why Buffalo is destined to be a university center.

10.00 P.M.—A luncheon will be spread in the library of the college.

WEDNESDAY, MAY 29.

10.00 A.M.—The clinics will begin at the Buffalo General Hospital.

Dr. Matthew D. Mann, Dean and Professor of Obstetrics and Gynecology, will give a clinic in Diseases of Women.

11.00 A.M.—Dr. Roswell Park, Professor of Principles and Practice of Surgery and Clinical Surgery, will give a clinic in General Surgery.

12.30 P.M.—The trustees of the Buffalo General Hospital, have very generously provided a luncheon at the hospital for the alumni of the medical department of the University of Buffalo.

1.30 P.M.—Dr. Charles G. Stockton, Professor of Principles and Practice of Medicine and Clinical Medicine, will give a clinic in Internal Medicine.

3.00 P.M.—Dr. Ernest Wende, Health Commissioner of Buffalo, and Professor of Dermatology, will give a clinic in Diseases of the Skin.

3.30 P.M.—Dr. James W. Putnam, Professor of Diseases of the Nervous System will give a clinic in Neurology.

3.45 P.M.—Dr. William C. Krauss, will give a clinic in Diseases of the Mind.

4.00 P.M. to 6.00 P.M.—Dr. Charles Cary '75, will receive at his home, 340 Delaware Avenue, in the afternoon of Wednesday, May twenty-ninth, from four to six. Through the executive committee each alumnus of the medical department of the University of Buffalo, is invited.

8.00 P.M.—Wednesday evening, May 29th, has been set aside as Fraternity Night. The "I. C. I.," the "A. O. D.," the "O. U. P.," and the "N. S. N.," have each prepared a program for the entertainment of its alumni, for which each has issued invitations. It is hoped that the alumni will enjoy the hospitality of the underclassmen.

THURSDAY, MAY 30.

10.00 A.M.—The clinics continue at the Buffalo General Hospital, Dr. Charles Cary, Professor of Clinical Medicine will give a clinic in Internal Medicine.

11.00 A.M.—Dr. Irving M. Snow, Clinical Professor of Pediatrics, in conjunction with Dr. DeWitt H. Sherman, Adjunct Professor of Therapeutics, will give clinics in Diseases of Children.

11.30 A.M.—Dr. William C. Phelps, will give a clinic in General Surgery. Dr. John Parmenter, Professor of Clinical Surgery, will give a clinic in General Surgery.

1.00 P.M.—The association will give a luncheon at the Saturn Club, corner Delaware avenue and Edward street, to its members.

3.00 P.M.—The clinics will continue at the Hospital of the Sisters of Charity, Main street. Dr. Henry C. Buswell, Adjunct Professor of Clinical Medicine, will give a clinic in Internal Medicine.

4.00 P.M.—Dr. Edward J. Meyer, Adjunct Professor of Clinical Surgery, will give a clinic in General Surgery.

8.30 P.M.—Thursday evening, May 30, has been set aside as Free-Lance Night.

The Buffalo Academy of Medicine will have a meeting to which the alumni are especially invited.

Class dinners, smokers and theatre parties will occur as determined.

The executive committee has arranged to provide seats for the various performances at the theatres. Tickets for choice locations will be on sale at the treasurer's desk until 1 P.M., Friday, May 31.

FRIDAY, MAY 31.

11.00 A.M.—The Sixty-second Annual Commencement Exercises of the University of Buffalo, including the Departments of Medicine, Pharmacy, Dentistry and Law will take place at the Teck theatre, Main and Edward Streets.

Jeremiah Whipple Jenks, A.M., Ph. L.L.D., Professor of Political Economy and Politics, Cornell University, will deliver the address.

1.00 P.M.—The faculty of the Medical Department will receive the graduates, their friends and the alumni at the University Club, corner Delaware avenue and Allen street, where a luncheon will be served.

SPECIAL CLINICS.

The executive committee is pleased to announce that the following gentlemen will give clinics in the special subjects set down. The time and place to be announced upon the bulletin board in the College Hall.

EYE.—Dr. Lucien Howe, Clinical Professor of Ophthalmology; Dr. Arthur G. Bennett, Instructor in Ophthalmology; Dr. John D. Flagg, Instructor in Ophthalmology.

EAR.—Dr. George F. Cott, Clinical Professor of Otology.

NOSE.—Dr. Frank W. Hinkel, Clinical Professor of Laryngology; Dr. W. Scott Renner, Clinical Professor of Laryngology; Dr. James J. Mooney, Clinical Lecturer in Laryngology; Dr. Henry J. Mulford, Lecturer in Laryngology.

GYNECOLOGY.—Dr. Lawrence H. Hanley, Clinical Professor of Obstetrics.

SKIN.—Dr. Alfred E. Diehl, Adjunct Clinical Professor of Dermatology; Dr. Grover W. Wende, Clinical Professor of Dermatology.

BOOKS AND AUTHORS.

The Practice of Obstetrics. By Eminent Authorities. Edited by **Reuben Peterson, A.B., M.D.**, Professor of Obstetrics and Diseases of Women in the University of Michigan, Ann Arbor, Octavo, 1087 pages, with 523 engavings and 30 full-page plates in colors and monochrome. Lea Brothers & Co., Philadelphia and New York, 1907. (Cloth, \$6.00; leather, \$7.00; half morocco, \$8.00, net prices).

The practitioner's library in three volumes covering the fields of obstetrics, gynecology, and pediatrics, is a combination that appeals to the average physician as being at once practical and

scientific,—practical because useful, scientific because correlated. The preceding volumes have considered gynecology and pediatrics, respectively, hence this one on obstetrics closes the series. The contributors,—for it will be remembered that the work is encyclopedia in character,—are Charles Sumner Bacon, Montgomery A. Crockett, W. A. Newman Dorland, G. Carl Huber, Hugo Ehrenfest, Henry Foster Lewis, Walter P. Manton, John F. Moran, Benjamin R. Schenck and Alfred Scott Warthin.

The first section, consisting of three chapters, treats of the physiology and development of the ovum, and is written by Dr. Huber. It is a scientific presentation of the subject from the latest embryologic data. The second section, consisting of five chapters, deals with the physiology of pregnancy, and is written by Dr. Manton, who is eminently qualified for the task assigned him. The chapter on differential diagnosis, a very important subject, is particularly to be commended. The third section, six chapters, presents the physiology of labor, and is written by Dr. Dorland. It is a practical dissertation, the chapter on the management of labor being especially deserving of praise. The physiology of the puerperium, section four, in three chapters, by Dr. Lewis, treats of an important branch in a satisfactory manner.

The pathology of pregnancy forms the subject of the fifth section, consisting of thirteen chapters, written by Drs. Ehrenfest, Warthin, Lewis and Schenck, deals with a topic of the utmost importance, and each of the contributors has met the duty assigned him with ability. The next section, number six, in eleven chapters, handles the pathology of labor, and is written by Drs. Moran and Ehrenfest. It is a scientific disquisition upon an essential part of obstetrics, and will prove instructive to physicians as well as students. The pathology of the puerperium forms the subject matter of section seven, which is made up of three chapters and is written by Drs. Lewis and Bacon.

Obstetric operations naturally form an attractive section, number eight, which is presented by Dr. Crockett, formerly of Buffalo, now of Pinehurst, N. C. Dr. Crockett's experience is such as to entitle him to be heard on this topic, and he deals with it admirably. The final section, number nine, in six chapters deals with the newborn infant, and is written by Drs. Lewis and Bacon.

The work viewed in its entirety is an exposition of the science and art of obstetrics in its present state, is a credit to all concerned in creating it, and will stand as an addition to the literature of medicine. It is profusely and artistically illustrated, many of the engravings being original and all are instructive.

Conservative Gynecology and Electrotherapeutics. By G. Betton Massey, M.D., Attending Surgeon to the American Oncologic Hospital, Philadelphia. Fifth edition. Illustrated. Octavo, pp. 467. Philadelphia: F. A. Davis Co. 1906.

It cannot be denied that this author, whether one differs from him or agrees with him, displays great energy in exploiting his

belief as to the value of electricity in the treatment of diseases of women. He has pursued the subject through five editions of his book, the first having been issued in 1889, and he now asks the medical profession to accept this work as the authoritative exponent of "conservatism in gynecology," though he regards the specialty still in its "formative stages."

The author in this edition has considered the constant current derived from street mains in its latest phase, and has further elaborated the cataphoric treatment of cancer. Whoever may wish to obtain knowledge concerning the uses of electricity can gain it from a careful study of this book, the author being most painstaking in this direction. The general make-up of the book and the illustrations remain as in the last previous edition, it being beyond criticism in these respects.

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. Edited by **W. T. Longcope, M.D.** Volume 1, Seventeenth series. 1907. Philadelphia and London: J. B. Lippincott Co. (Cloth, \$2.00).

The first volume of the seventeenth series contains some excellent literature as will be observed by noting the following list of titles and authors. The first section relates to treatment, the first number being on the psychic treatment of some of the functional neuroses, by Lewellys F. Barker; the second is entitled, recent advances in the prevention and cure of tuberculosis, by Frederick P. Gay; the third is on the diagnosis and treatment of gastric ulcer, by David Somerville; and the fourth considers the treatment of functional heart disease, being a clinical lecture by James J. Walsh.

In the section on medicine we find the clinical diagnosis of enlargement of the thymus, by Alfred Scott Warthin; the functional capacity of the heart, by George William Norris; exhaustion and toxemia as underlying factors in the production of neurasthenia, hysteria, and delirium, by Theodore Diller.

Under the head of surgery the titles are, report of two months' service at Bellevue Hospital, by Frederick S. Dennis; a clinical lecture on neurotic affections of the joints, by Charles A. Morton; monarticular inflammation of the knee joint, (and several other subjects) by Nicholas Senn; on the opening of the pleural cavity without pneumothorax, by Th. Tuffier.

In obstetrics and gynecology the contribution is, disorders of the umbilicus with special reference to the newborn and the infant; umbilical infections, by A. Ernest Gallant. In ophthalmology is an article on intraocular angiosclerosis and its prognostic and diagnostic significance, by George E. deSchweinitz. In laryngology there is also one article—hysterical mutism, by G. Hudson Maknen.

Under progress and medicine during 1906 treatment is reported by A. A. Stevens; medicine by David L. Edsall and Verner Nisbet; and surgery by Joseph C. Bloodgood.

The foregoing synopsis of the material which this volume contains indicates literature of great value and stamps this number as one of the best of the series.

Biographic Clinics. By **George M. Gould**, M.D., Editor of American Medicine. Vols. IV and V. Influence of Visual Function, Pathologic and Physiologic, upon the Health of Patients. 12mo, about 400 pages each. Philadelphia: P. Blakiston's Son & Co. (Price, \$1.00 each, net).

For a considerable period of time the influence of the visual function upon health has been recognised, to a certain extent at least, but it has remained for Dr. Gould to accentuate, develop and give more exact place to much of the symptom complex bearing on the subject.

These two volumes of the biographic clinics series contain essays concerning the influence of visual function, pathologic and physiologic, upon the health of patients. They have been collected from journalistic and magazine sources and reflect the author's views on the subject with great emphasis. They furnish interesting and instructive reading and may be studied with profit by even those who do not endorse the author's views in toto.

In volume four are many medico-biographic sketches which show defective visual function, some of which are of unusual interest. Especially so is that of Lafcadio Hearn, who had but one eye and that evidently enormously near sighted; the other had been lost in youth, yet what beautiful pictures he wrote of Japanese life and character.

And so on unto the end are many entertaining and instructive sketches that serve to reveal the inner life of men of talent who were eccentric.

Progressive Medicine, Vol. I, March, 1907. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by **Hobart Amory Hare**, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 280 pages, with illustrations. Lea Brothers & Co., Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00, carriage paid to any address).

The contributors to this number are William T. Belfield, Joseph C. Bloodgood, John Rose Bradford, John G. Clark, William B. Coley, Floyd M. Crandall, Edward P. Davis, William Ewart, Edward Milton Foote, Charles H. Frazier, William S. Gottheil, Edward Jackson, D. Braden Kyle, H. R. M. Landis, Robert B. Preble, B. Alexander Randall, William G. Spiller, J. Dutton Steele, and Alfred Stengel.

The topics dealt with in this number are surgery of the head, neck and thorax, by Charles H. Frazier; infectious diseases, including acute rheumatism and croupous pneumonia, by Robert B. Preble; the diseases of children, by Floyd M. Crandall; rhinology and laryngology, by D. Braden Kyle; otology, by B. Alexander Randall.

The book is full of material interesting to both physician and surgeon. The low subscription price, together with its valuable contents, should place it on every progressive physician's table.

Psychology Applied to Medicine. Introductory Studies by **David W. Wells**, M.D. Lecturer on Mental Physiology, and Assistant in Ophthalmology, Boston University Medical School; ophthalmic Surgeon, Massachusetts Homeopathic Hospital, Boston; oculist, Newton (Mass.) Hospital. Philadelphia: F. A. Davis and Company. 1907. Price, \$1.50.

The study of psychic phenomena is always a most interesting one and is a necessary adjunct to the complete understanding of the normal or diseased mind. This work of Doctor Wells is an essay—elaborated into a series of studies—pertaining to mental phenomena—as “habit, instinct, reason, sensation, hypnosis, psycho-therapeutics and the psychic element in medicine. To those interested in psychic phenomena, it is a very valuable, concise and interesting little work. To those not interested, it may be the means of encouraging an appetite for these studies. It is well written, well printed, and well worth a careful perusal.

W. C. K.

BOOKS RECEIVED.

Chemical Pathology. Being a Discussion of General Pathology from the Standpoint of the Chemical Processes Involved. By H. Gideon Wells, Ph.D., M.D., Assistant Professor of Pathology in the University of Chicago and in Rush Medical College, Chicago. Octavo of 549 pages. Philadelphia and London: W. B. Saunders Company, 1907. (Cloth, \$3.25 net.)

A Textbook of Embryology. By John C. Heisler, M.D., professor of Anatomy in the Medico-Chirurgical College of Philadelphia. Third revised edition. Octavo volume of 432 pages, with 212 illustrations, 32 of them in colors. Philadelphia and London: W. B. Saunders Company, 1907. (Cloth, \$3.00 net; half morocco, \$4.25 net.)

Diagnostics of Diseases of Children. By LeGrand Kerr, M.D., Professor of Diseases of Children at the Brooklyn Postgraduate Medical School. Octavo of 542 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1907. (Cloth, \$5.00 net; half morocco, \$6.50 net.)

Surgical Diagnosis. By Daniel N. Eisendrath, M.D., Adjunct Professor of Surgery in the Medical Department of the University of Illinois (College of Physicians and Surgeons). Octavo of 775 pages, with 482 original illustrations, 15 in colors. Philadelphia and London: W. B. Saunders Company, 1907. (Cloth, \$6.50 net; half morocco, \$8.00 net.)

Modern Surgery: General and Operative. By J. Chalmers DaCosta, M.D., Professor of the Principles of Surgery and of Clinical Surgery in the Jefferson Medical College, Philadelphia. Fifth revised edition. Enlarged and reset. Octavo volume of 1283 pages, with 872 illustrations, some in colors. Philadelphia and London: W. B. Saunders Company, 1907. (Cloth, \$5.50 net; half morocco, \$7.00 net.)

The American Pocket Medical Dictionary. Edited by W. A. Newman Dorland, M.D., editor "The American Illustrated Medical Dictionary." Fifth revised edition. 32mo of 574 pages. Philadelphia and London: W. B. Saunders Company, 1906. Flexible morocco, gold edges, \$1.00 net; thumb indexed, \$1.25 net.)

Atlas and Epitome of Diseases of Children. By Dr. R. Hecker and Dr. J. Trumpp, of Munich. Edited, with additions, by Isaac A. Abt, M.D., Assistant Professor of the Diseases of Children in Rush Medical College, in affiliation with the University of Chicago. With 48 colored plates, 147 black and white illustrations, and 453 pages of text. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00 net.

A Manual of Personal Hygiene: Proper Living upon a Physiologic Basis. By eminent specialists. Edited by Walter L. Pyle, M.D., Assistant Surgeon to the Wills Eye Hospital, Philadelphia. Third revised edition. 12mo of 451 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1907. (Cloth, \$1.50 net.)

A Manual of the Diagnosis and Treatment of the Diseases of the Eye. By Edward Jackson, M.D., Professor of Ophthalmology in the University of Colorado. Second revised edition. 12mo of 615 pages with 182 text-illustrations and 2 colored plates. Philadelphia and London: W. B. Saunders Company, 1907. (Cloth, \$2.50 net.)

A Textbook of Materia Medica for Nurses. Including Therapeutics and Toxicology. By George P. Paul, M.D., Assistant Visiting Physician and Adjunct Radiographer to the Samaritan Hospital, Troy, N. Y. 12mo of 240 pages. Philadelphia and London: W. B. Saunders Company, 1907. (Cloth, \$1.50 net.)

The Care of the Baby. By J. P. Crozer Griffith, M.D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania. Fourth revised edition. 12mo of 455 pages illustrated. Philadelphia and London: W. B. Saunders Company, 1907. (Cloth, \$1.50 net.)

The Essentials of Histology, Descriptive and Practical. For the use of Students. By Edward A. Schafer, F.R.S., Professor of Physiology in University College, London. New (7th) edition, revised and enlarged. Octavo, 507 pages, with 552 illustrations. Lea Brothers and Co., Philadelphia and New York, 1907. (Cloth, \$3.50, net).

A Treatise on the Practice of Medicine. For Practitioners and Students. By Arthur R. Edwards, M.D., Professor of the Principles and Practice of Medicine and Clinical Medicine in the Northwestern University Medical School, Chicago. Octavo, 1328 pages, with 101 engravings and 19 plates. Lea Brothers & Co., Philadelphia and New York, 1907. (Cloth, \$5.50, net; leather, \$6.50, net).

Modern Medicine. Its Theory and Practice. In Original Contributions by American and Foreign Authors. Edited by William

Osler, M.D., Regius Professor of Medicine in Oxford University, England; formerly Professor of Medicine in Johns Hopkins University, Baltimore; in the University of Pennsylvania, Philadelphia, and in McGill University, Montreal. Assisted by Thomas McCrea, M.D., Associate Professor of Medicine and Clinical Therapeutics in Johns Hopkins University, Baltimore. In seven octavo volumes of about 1,000 pages each; illustrated. Volume I. Lea Brothers & Co., Philadelphia and New York, 1907-1908. (Price per volume, cloth, \$6.00; leather, \$7.00; half morocco, \$7.50, net prices).

A Practician's Hand-Book of Materia Medica and Therapeutics, based upon established physiologic actions and the indications in small doses. By Thomas S. Blair, M.D. 250 pages, net. Published by The Medical Council, 4105 Walnut street, Philadelphia, Pa. (Price \$2.00.)

Medical Jurisprudence, Forensic Medicine, and Toxicology. By R. A. Witthaus, A.M., M.D., Professor of Chemistry, Physics and Toxicology in Cornell University; and Tracy C. Becker, A.B., LL.B., Professor of Criminal Law and Medical Jurisprudence in the University of Buffalo. Second edition. Vol. II. Octavo, pp. vii-1008. New York: William Wood & Co. 1907. (Muslin, \$6.00; law sheep, \$7.00, net prices).

Transaction of the twelfth annual meeting of the American Laryngological, Rhinological and Otological society held at Kansas City, Mo., June 11-12, 1906. Wendell C. Phillips, M.D., secretary.

Wellcome's photographic exposure. Record and diary, 1907. Burroughs Wellcome and Co., 45, Lafayette St., New York.

LITERARY NOTES

THE *Index Medicus* is sending out an appeal to the medical profession for support. We quote the following paragraph from its circular:

The subscription price of the last five volumes of the First Series of the *Index Medicus* was \$25 a year. In setting the annual price of the present series at \$5, though it bears no proportion to the cost of production, the Carnegie Institution of Washington anticipated that physicians, health officers, librarians and statisticians would very generally subscribe for the journal. This expectation has not been realised. Unless it appears that the *Index Medicus* is of greater service to the medical profession and can help to support itself to a greater extent than in the past, it may become advisable to discontinue its publication.

While we are prepared to admit the usefulness of the *Index Medicus* to the physician engaged in literary pursuits, we cannot understand how it could reasonably be expected that any considerable number of physicians outside of the group named would pay \$5 a year for the magazine in question. On the other hand, we are unable to understand why the Carnegie Institution should not continue the publication of the *Index*, paying the deficit out of its own funds. This, seems to us, is the function and purpose of that institution.

THE *Journal of Ophthalmology and Oto-Laryngology* sent out its first number last April. It is a well printed, illustrated magazine devoted to the specialties which its title indicates. We quote from its announcement the following paragraphs through which it modestly introduces itself to the profession.

The *Journal* is a monthly publication of about forty pages of original contributions, society reports, abstracts of current literature, personal mention, book reviews, etc.

The office of publication is 100 State street, Chicago, to which all communications should be addressed.

The subscription price of the *Journal* is \$2 per year, sent postage free in the United States, Canada, Mexico, Cuba, and our insular possessions.

Original papers bearing on the subject of ophthalmology, otology, rhinology or laryngology are solicited with the understanding that they are contributed exclusively to this journal. Items of personal interest to the profession will be gratefully received.

THE second number of *Folia Therapeutica*, of which we published an advance notice in the April issue of this magazine, has come to our table. It is a periodical relating to modern therapeutics and pharmacology designed especially for medical practitioners. It bears the date of April, 1907, and opens with a letter from Professor G. A. Ewald, of Berlin, in which he states that it will be his great pleasure, from time to time, to report to the *Folia Therapeutica* new matter connected with the subject of therapeutics. Then follows an interesting group of original articles, some of which are illustrated. It contains also abstracts from articles, reviews of books, and an index of current literature on therapeutics. This magazine promises through the appearance of its initial numbers to become a valuable addition to the periodic literature of medicine.

THE *Detroit Medical Journal* has purchased *Leonard's Illustrated Medical Scientific Journal*. Three medical journals in Detroit have retired from the field in the last three months which is undoubtedly a good thing for Detroit and a vastly better one for the profession in general. The *Detroit Medical Journal* is to be congratulated on its acquisition. It is one of the better medical magazines of the day.

THE *Annals of Surgery* for June, 1907, will be a special number containing a collection of the choicest literature on modern surgery. Each article will be a practical, comprehensive treatise

by an eminent specialist who has actually performed the operations described. No expense will be spared to make this the best issue, completing the forty-fifth volume.

The colored illustrations, of which there will be an abundance, have been placed in the hands of the leading medical artists of the country, and will be reproduced to the minutest detail.

It is expected that this number will at least equal that of December, 1904, which was the anniversary number of the *Annals* and which created a stir in the surgical world. The number in question will excel in point of illustration and the price of a single copy is fixed at one dollar.

THE *British Gynecological Journal* announces, through its editor, Dr. J. J. Macan, that it will cease publication in its present form in August next. The Obstetrical Society of London and the British Gynecological Society will unite to form a single Section of Obstetrics and Gynecology in the Royal Society of Medicine, and the *Obstetrical Transactions* and the *British Gynecological Journal* will be superseded by the publication of the Proceedings of that Section in a form which will represent and continue both the former publications.

DR. S. A. KNOPF of New York, has obtained distinction in his studies of tuberculosis. He is the author of a monograph entitled "Tuberculosis as a Disease of the Masses and how to Combat it." This is an international prize essay and is now in its fourth edition, having been awarded a prize, July 31, 1900, by the International Congress on Tuberculosis. It is a monograph full of instruction for the masses, but is also interesting to physicians. It is through the wide distribution of such literature that hope may be entertained of instructing the people sufficiently to, at least, limit the awful destructiveness of pulmonary tuberculosis.

ITEMS.

THE STATE CIVIL SERVICE COMMISSION will hold examinations June 15, 1907, for the following positions: Court attendant, Erie county service, \$1,200; custodian or messenger, Kings county offices, \$720 to \$1,000; elevator conductor, city and county hall, Buffalo, \$540; police constable, \$900, and watchman, \$1.75 a day at the Niagara Reservation; resident physician, State Hospital for Crippled and Deformed Children, \$900 and maintenance; superintendent of inspection, state board of charities, \$2,500; veterinarian, health and agriculture departments, \$7 a day; woman officer, state charitable institutions, \$300 to \$360 and maintenance.

The last day for filing applications for these positions is June 8. Full information and application forms may be obtained by addressing Charles S. Fowler, Chief Examiner, Albany.

THE OD CHEMICAL COMPANY announces its removal from 15 Cedar street to its new and commodious building, 61 Barrow street, New York.

MOET AND CHANDON White Seal 1900 Champagne, is the most palatable and efficient sparkling wine for use in case of sickness of which we have any knowledge. It is free from the objectionable features that often follow the use of some champagnes and is a positive aid to treatment when rapid stimulation is required, and in cases of nausea or obstinate vomiting. The JOURNAL is making this statement from knowledge obtained through its therapeutic employment in the sickroom, and from general clinical observation of the results of such application of this most delightful wine. A trial will satisfy the doubter. Pint bottles can be tapped with the champagne tapping device, or the patent rubber stopper may be employed, thus avoiding extravagant use or waste of the wine.

APPOLLINARIS, the "queen of table waters," is the most satisfactory of all sparkling waters in the sickroom. It is a refreshing beverage as well as a therapeutic agent of value; it agrees with a sensitive palate and it soothes an irritable stomach. The general use of Apollinaris, of course, is well understood; we are now discussing its merits from our experience with it in the sickroom. If physicians would prescribe it more frequently, it would be more gratifying to their patients and more satisfactory to themselves.

"Boss," shouted the big cook from the kitchen, "we have a lot of scraps out here that ain't working."

"Lot of scraps, eh?" replied the proprietor of the Shovedown lunchroom. "Well, mix them all together, add a little fiery tobasco sauce and then put a sign outside, 'Central America Pudding Today.'"—Chicago News.

BUFFALO MEDICAL JOURNAL.

VOL. LXII.

JULY, 1907.

No. 12

ORIGINAL COMMUNICATIONS.

The Need of a Trained Microscopist in Every Community.¹

By WILLIAM C. KRAUSS, M.D. Buffalo, N. Y.

THE early trend of civilisation westward was marked by a sequence of events which was characteristic of the early settlers and pioneers, and which might well be called the *evolution of society*.

The pioneer in casting around for a settlement, generally chose a clearing near some running stream of water. In course of time, a run of stone, driven by water power, crude but efficient for the purpose, was the first indication that a stand was to be made for the development of a community, or settlement. The anvil and forge became a most necessary adjunct, and soon the blacksmith took his place at one of the corners of the cross roads. The influx of strangers and the urgency of harboring them comfortably, necessitated a suitable place of refuge and the tavern arose on one of the other corners. The merchant soon took his place at the remaining corner with his general store, including the post office, and which in due course of time served as club house, meeting place and a general clearing house for the exchange of opinion as well as of produce. Thus was established the miller, tavernkeeper, blacksmith and the merchant, the four pillars upon which modern society was to be erected. The log-cabin school was not long in building, neither was the meeting-house, which hand in hand, gave the growing settlement a dash of ethical as well as of spiritual culture. Events followed quickly, the ravages of disease, the growing population and the demand for operative treatment decided the physician to make his domicile here with the rest.

Prosperity and population increased hand in hand with rapid strides and the railroad took its place with the other elements

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York, at Syracuse, October 16, 1906.

of civilisation. The four corners had evolved from a hamlet to a village and was fast entering upon the threshold of a city. The merchant, the preacher, the physician and the teacher became the four pillars, around whom the ethical life of the community revolved. As the life of the community became more complex, the duties of the professional man augmented also, but to none more so than the general practitioner, who, until now, had served as physician, surgeon, obstetrician, alienist, and in short an all around general specialist. Division of medical work by segmentation gave rise to the surgeon, the ophthalmologist and in short the general specialist, one who knew little of many things and nothing much of any one thing. Still he professed his knowledge, and his faults and vices served to attract others who were efficient and well trained in their chosen fields of special study. The hospital was the natural sequence of events and the bringing together of the better qualified and stronger elements in the profession. With it, the trained nurse appeared and to all appearances, the plant had a modern, scientific foothold. But as hospital work progressed, and frequent consultation and interchange of opinion followed, the literature of the day discussed, societies organised for mutual self-help and improvement, it soon became apparent that the highest scientific methods had not yet been developed, and the best results had not yet been attained. The determination of albumin and sugar was no longer sufficient for a urine content examination. The physical signs of diphtheria, typhoid and tuberculosis were too slow in developing to give the best results in the treatment of these diseases. The appearance of the blood meant very little by the old method. Medicolegal questions were constantly arising and no one in the community had the time, nor the mental training or equipment to connect the laboratory with the bedside and interpret quickly and correctly the phenomena presented by the ever changing chemistry of the body. The diagnosis of disease by guesswork or "rule of thumb" had had its day, and the patient demanded, as well as the community, that the most modern methods and the most modern procedures be adopted in the diagnosis and treatment of disease. Prevention of disease by a proper and scientific examination of the food and water supply, the proper regulation of the tenement house evil, general sanitary and hygienic reforms demanded the services of an expert clinicopathologist, one who understands his microscope as thoroughly as the surveyor his transit. Such a man must of necessity be the finished product of the laboratory, skilled in histological, pathological and bacteriological technique and the practical adaptability of the same to the necessities of the municipality. As a factor in the community, he can render

inestimable service. He can detect the bacillus of tuberculosis long before the physical signs and symptoms are apparent. He can render a differential diagnosis early, between the Klebs-Loeffler bacillus of diphtheria and the ordinary streptococci of a simple tonsilitis. He can make a Widal test long before the diagnosis of typhoid fever is permissible. He can detect the source and nature of purulent discharges occurring about the body. In regard to the examination of the urinary contents, he is now able to delve deep into the chemical and histological mysteries and detect acetone, indican, diacetic and hippuric acids, and the end products of pathological changes. Along the alimentary canal, his work is of far reaching importance. The chemistry of the stomach is like an open book and he can read its mysteries with *his* test tube and lens as readily as the scholar reads his classics with *his* glasses. The cause and origin of the diarrheas become apparent and hence easily combated. The disturbances of assimilation are thoroughly ascertained and the deficiency or excessive flow of digestive secretion at once determined. The whole science of hematology, including blood pressure, is at his command, and the blood diseases are now more accurately diagnosed than any other class of ailments. With the advancement of diagnostic methods, sooner or later, therapeutic progress must also follow. This has already begun in reference to the leucocytosis in connection with the inflammatory processes of the closed cavities and operative measures have reduced mortality rates to a considerable degree.

In an interesting article on—"Of what Service is the Clinical Pathologist to the Clinician," Dr. Frederick E. Sondern, of Brooklyn, says:² Routine examinations of urine, blood, gastric contents, feces and some other secretions and excretions of the body are well within the scope of the clinician, provided he has the requisite time, the technical skill and maintains the necessary apparatus and reagents in efficient working order. The more complex chemical problems of the urine and other excretions such as the nitrogen partition, the sulphate partition, many of the more difficult quantitative determinations, can scarcely be undertaken by him with the hope of trustworthy results, and are better referred to the clinical pathologist. The main objection to the analytical work done by the clinician as a class, is not lack of accuracy, but rather a want of methodical procedure leading to complete investigation. The clinician is very apt to conclude his diagnosis and then make his urine analysis or blood examination with the purpose in mind, chiefly, to corroborate his clinical findings rather than with a view of excluding other possible conditions,

2 Long Island Medical Journal, March, 1907.

some of which may not occur to him at the time. A few examples may emphasise this point. A pallid young woman may show the clinical evidence of a chlorosis and her medical adviser, mindful of laboratory corroborating diagnostic aids, but lacking methodical procedure, determines the amount of hemoglobin to learn the degree of anemia, and test the urine for reaction and gravity as a matter of routine, and for albumin to exclude a possible renal lesion. Had both the blood and the urine examinations been complete he might have found a beginning leukemia, a slight diabetes, or a secondary anemia, instead of a chlorosis, with relative eosinophilia to justify a suspicion of possible intestinal parasites. One may argue that these other conditions give you quite a different clinical picture and that in diabetes the specific gravity of the urine would have attracted attention to the possible presence of glucose. True, ordinarily the clinical picture is indicative of the disease beyond question, but unfortunately there are exceptions.²

Again, ordinarily the gravity of diabetic urine is high, but from time to time you find glucose with a gravity of 1008, and these are just the cases with a typical clinical picture, in which you may ascribe the frequency of micturition to a neurotic polyuria often seen in chlorotic girls. Allow me to picture another example. A patient in previous good health is confined to bed with an acute febrile disease, the exact nature of which has not yet become apparent. His physician, we will assume, looks upon malaria or typhoid as the most probable explanation, and may give him a few good doses of quinine before deciding on a Widal test and a plasmodia hunt. Widal reactions are tardy in appearing, and most varieties of plasmodia soon leave the peripheral circulation after the administration of quinine. While a complete blood examination in this case does not give you the diagnosis, it does narrow down the possibilities, and usually leads to an earlier recognition of the disorder. The presence of a leucocytosis and relative polynuclear increase, at once suggests a most probable inflammatory lesion, though not indicating its site, and at the same time lends information as to its virulence and the degree of body resistance offered. The absence of these signs allows the exclusion of the diseases which occasion them and thus suggest the possibility of the different febrile disorders which occur without them. While you seldom obtain a Widal reaction in the first few days of a typhoid, the very frequent leucopenia and relative lymphocytosis are suggestive and while plasmodia of malaria may, for one or other reason, not be found in that disease the decided increase in the relative number of large lymphocytes is usually a corroborating feature. Examples of this kind are easily multiplied

and the lesson they teach is, that methodical and complete investigation of your specimens is necessary if you desire all the information they are capable of giving, and do not wish to occasionally meet with disagreeable surprises which such thoroughness might have avoided. In order to obtain the maximum information from laboratory aids in diagnosis with a minimum degree of error, a number of essentials must be carried in mind. Those of us who have argued in favor of one or other laboratory aid have always met with the response that such aid does not take the place of bedside observation. Allow me to say with all the emphasis of which I am capable, that no laboratory procedure, no matter how important, ever takes the place of clinical observation, and it is the man who is the most acute bedside observer that gets the most help from laboratory aids, for he is generally also well informed as to the value and significance of the changes from the normal noted in the laboratory observation. As usual, one encounters the two extremes, the young man overenthusiastic about laboratory help and apt to misinterpret it on account of neglect of bedside observation and the old one not sufficiently versed in the help to be had from laboratory aids or their significance and overconfident in his clinical intuition, both err and err badly sometimes, and justify the motto, "He who makes his diagnosis in the laboratory is as short sighted and liable to grave error as the man who ignores the microscope and the test tube." The diagnostician who strives to excel is the one who develops his bedside skill to the greatest possible degree, and who learns to apply the results of complete laboratory investigations as an aid in his work."

These are but some of the fields in which the clinico-pathologist is working. These are but a few of the problems which he will be called upon to solve. He will become the center, yes, and the head of the board of health and upon him, more than upon any other member of the Board will the hygienic prosperity of the community depend. No city or village of any importance can afford to be without the services of such a man and concerted effort of the profession with the city or town councils will find the means and appurtenances for the installation of a properly equipped and efficient clinicopathological laboratory. What can be done along the lines suggested can best be inferred by quoting at some length from the last Biennial Report of the Board of Health of Chicago.³

To those who have learned to look to Chicago as the one city where things are done upon a large and thorough scale, the last Annual Report of the Department of Health, will come as no

3 Editorial in the Cleveland Medical Journal, April, 1906.

surprise. To some of us, however, we are confident that it will be at least news to be told that Chicago is the healthiest city in proportion to the population in the country, and the mass of interesting and valuable data given in this report, only confirms the common impression of the attention given to detail and of the ability to cope with things on a large scale so commonly attributed to the Windy City. Chicago's Commissioner of Health is indeed to be congratulated upon the extraordinary showing made in this report, a showing so remarkable that we venture to quote from it at length.

DURATION OF LIFE IN CHICAGO.

One's attention is at once caught by the table published at the beginning of this report, setting forth graphically, the proportion of deaths at given ages to the total deaths at all ages in Chicago from 1875 to the close of 1905. The average age of decedents in Chicago during the year 1875 was 16 years, two months, and 12 days; during 1885, it had increased to 20 years, 4 months, and 26 days; during 1895, there was a further increase in the span of the average life to 24 years, 7 months, and 9 days; and during the year 1905, the average age of the decedents had reached 31 years and 10 months, almost double the average duration of life 30 years ago.

Even more interesting are the figures given in detail for the various year periods during this time, especially so being the figures of the proportion of deaths at a given age to the total deaths at all ages. During 1875 for those under one year, the percentage was 38.3; during 1905 this had been reduced to 21.4; during the period from two to five years, the figures given are 8.3% for 1875, as against 4.3% during 1905.

Just as the average percentage during the early age periods has diminished, so has the age period, in proportion to all ages increased in the periods above 30, until in the age period over 70, the figures given are 3.8% during 1875 as against 10.1% during 1905. Thus it will be seen that measured by the average age of all who died in the city of Chicago 30 years ago and all those who died in 1905, the average duration of life in this city has nearly doubled during a single generation.

CHICAGO'S ACTUAL DEATH RATE.

Up to November 22, 1905, the actual death rate in Chicago was 13.75 in 1000; the second lowest, we are told, in the city's history; the lowest annual death rate in Chicago's history occurring during the year 1904, when it was 13.62. This death rate is the lowest of any large city in the world with a population of 300,000 or over. As indicating the continued tendency to a lower

death rate during the last 20 years, the following figures are of interest. In 1884, with a population of 629,885, the deaths numbered 12,471; in 1904, with a population of 1,932,315, the deaths numbered 26,311, an increase of only 13,840, not much more than twice as many, while the population was three times as great. The death rate in 1884 in Chicago was 19.63; in 1904 it was 13.62 per 1000. The following graphic percentages show this extraordinary betterment.

Percent. of increase in population in 20 years, 1884-1904	209.9
Percent. of increase in actual number of deaths in 20 years	110.9
Percent. reduction in the annual death rate in 20 years	30.6

These figures mean that during the year 1904, owing to the improvement in Chicago's health, there was a saving of 11,620 lives as against the mortality which would have occurred had the death rate of 1884 prevailed during that year.

The actual death rate for the year 1905 was 13.67 per 1000, a rate 6.4% lower than that of Cleveland; 20.8% lower than that of Philadelphia; 25.4% lower than that of New York; and 26.1% lower than that of Boston. This record is truly extraordinary. The actual figures compiled from the reports furnished by the respective cities are given below. In this connection it is but fair to note that Chicago is the only one of these cities using the United States Census Office estimate of population, the other cities, excepting Boston, computing their death rate on an estimate of population much in excess of the Census Office estimate.

SOME DISEASES THAT HAVE BEEN CONTROLLED.

Interesting as showing the value of efficient sanitary administration, the greatest reductions of mortality have been shown among the diseases over which the Health Department have had the greatest and most direct control. Among the diseases which have thus shown a marked diminution not only in prevalence but in mortality rate, may be mentioned first small-pox. In the decade from 1885 to 1894 this scourge caused 1,072 deaths, a mortality rate of 0.83 per 10,000 of population, while during the last ten years, there were but 247 deaths or a mortality rate of 0.16 per 10,000 of population.

Diphtheria and croup which in the early decade carried off 13,566 victims, were responsible for only 8,168 deaths during the last 10 years. A mortality rate of 14.33 in the first period as against 5.2 in the second. A reduction of 63.7% and a constructive saving of 14,545 lives.

Even more interesting is the reduction of the mortality rate from typhoid fever and the diarrheal diseases. In the first decade typhoid fever caused 7,844 deaths, a mortality rate of 7.7 per 10,000 of population; in the second decade 5,392 deaths, a rate

of 3.3 and a reduction of 57.1%. Had the death rate of the early decade prevailed, there would have been 7,348 more deaths from typhoid fever during the last 10 years.

Diarrheal diseases were responsible for 25,235 deaths in the early decade, with a death rate of 25.6% per 10,000 of population, while during the last decade there were but 24,165 deaths from this cause, with a mortality rate of 15. This reduction of 41.4% implies a saving of 18,193 lives; such results speak for themselves.

THE REDUCTION IN THE INCIDENCE OF CONTAGIOUS DISEASES.

It must be conceded that the decrease in the occurrence of measles, scarlet fever and whooping cough is due to improved hygienic conditions as well as better nutrition and care. The mortality for measles during the first decade was 1.91, in the second 0.83, a decrease of 56.6%. Scarlet fever has shown a decrease in its mortality rate of 55.5%, while whooping cough shows a decrease of 28.3%, a constructive saving for these three diseases of 4,887 lives by their reduced mortality.

THE CHIEF CAUSES OF DEATH FOR HALF A CENTURY.

Perhaps the most striking table which appears in this valuable report is that demonstrating graphically by means of colored disks, the 12 chief causes of death in each decade during the period from 1856 to 1905 together with their mortality rate for each 10,000 population during each decade. During the first decade 1856 to 1865, the 12 chief causes of death are given in the following order, diarrheal diseases, consumption, diphtheria and croup, scarlet fever, nervous diseases, violence, typhoid fever, pneumonia, small-pox, measles, malaria, and heart diseases. Comparing the fifth decade 1896 to 1905 with this period of 40 to 50 years together, one is struck by the great diminution in the mortality rate for every specific disease with the single exception of that from pneumonia. That the mortality rate from pneumonia should have increased is undoubtedly explainable by reason of its occurrence in those individuals whose life has already been prolonged by the increase in the average duration. During the last decade, pneumonia has ranked as the first cause of death and consumption has at no time fallen below the third cause of death. Curiously enough, the deaths from violence have ranked as the fifth or sixth cause throughout all this period. Diphtheria has fallen from the third chief cause of death to the tenth. Typhoid fever from the seventh to the 11th and scarlet fever from the fourth to the 12th, while small-pox has fallen below the first 12 causes of death. The figures given in this table are extremely interesting and will bear careful and critical analysis, showing

clearly the results accomplished by modern hygiene and sanitation.

What are the agencies which have accomplished this remarkable results? Dr. Chas. J. Whalen, the Commissioner of Health, from whose summary report the above figures are taken, tells us that this has been accomplished by constant supervision of the water supply, with publicity of its daily condition, regulation of lake dumping, securing sewage diversion from the lake, the correction of more than 100 local defects in tunnels and pumping stations in a single year, the promotion of the drainage channel, and by a vast amount of work in the way of chemical and biological examinations.

The instructive report of the Chicago Board of Health can be duplicated to some degree by that of any of the larger progressive American cities. Notably—New York, Detroit, Milwaukee, Buffalo and many others and serves as a beacon to the smaller cities and villages which unfortunately are not so thoroughly and efficiently equipped for fighting disease.

A trained microscopist with a suitable laboratory is within the grasp of any community containing ten or more active-progressive physicians—if they will act in concert and induce the town or county authorities to help defray the expenses of such a plant.

The action of the Canandaigua (N. Y.) physicians is an example of what persistence, energy and push will do. Led by Drs. Beahan and Hallenbeck, members of this association, they have built up a hospital system, installed a clinico-pathological laboratory and publish monthly a very creditable report of the work they are accomplishing indicated by this paper.

Other communities can do the same thing and must do it—if they are to be representatives of the active scientific spirit—so rampant just at the present time.

479 DELAWARE AVENUE.

Physician - Civilian.¹

By CHARLES E. LOW, M.D., Pulaski, N. Y.

IN all lines of human endeavor, the present age is one of organisation and specialisation, and while this tendency no doubt operates for the more rapid advancement of concrete material objects, it has often occurred to the writer that this very specialisation of organised effort may be carried to such an extreme that in the ultimate analysis the individual will be found to

1. Read at the thirty-ninth annual meeting of the Medical Association of Central New York, at Syracuse, October 16, 1906

have become, as it were, an integer in a great mechanical device, destined to rotate in his own little plane without any definite conception of the operation of the whole mechanism or the result which it was intended to produce.

Modern education is more and more yielding to this tendency as evidenced by the rapid increase in technical schools and selective or special collegiate courses. Business and industrial conditions are more and more forcing the individual into the cog-wheel rhythm. Society is more and more divided into sections for accomplishing certain ends and the universal tendency is to strive for the concrete, without perhaps due consideration for abstract results. Nor is this tendency without its influence in the profession of medicine. It is to be feared that modern so called exact methods of diagnosis, including the use of the microscope and other instruments of precision, have possibly had the tendency to direct the attention of medical men so much toward a particular symptom or locality that the art of medicine has suffered through failure to grasp the individuality of the patient or the peculiarities of his environment, as related to the diagnosis, prognosis and treatment of the case as a human entity. In saying this, I do not underestimate the value of these scientific auxiliaries, but I wish to recommend the necessity of the correlation of all ascertainable facts and the application of the knowledge resulting from the examination of special organs, or of the urine, blood, sputa, and feces, not alone as physical or chemical facts of the ward or laboratory but as conditions related to a wonderfully organised complex human being.

Let us ask ourselves honestly if there is not much in the practise of our specialties which falls short of yielding ideal results to the patient. Do all specialists view the patient in the diverse aspects which his case may demand and does the general practitioner always give the specialist as clear a conception of *his* views of it as he should? How many young men after but brief experience in general practise make their advent into some specialty more remunerative, without sufficient observation of the relations of disease to qualify them, and can their manual dexterity in their chosen field compensate the lack of discernment which makes it possible to properly estimate the true value of a localised condition in the symptom complex of disease? Laying aside any imputation of mercenary motives, I opine that much fewer fat fees would or could conscientiously be made to revert to these practitioners if they had a broader grasp of the constitutional relations of the special conditions which they treat. Nor is the attainment of the best medical qualifications the only ideal for which the physician should strive. From the nature of his calling

he is thrown in close contact with the rich and the poor, the learned and the ignorant, the genteel and the boorish, all classes are subjects for his ministrations, so there is nobody who has the opportunity to wield a greater influence for the betterment of mankind.

Yet, does the average physician appreciate or use his power in society so that he reaches the highest type of civilian?

When opportunity presents, as it often does, is he ever ready to steer some derelict off the shoals of ruin or is he fearful that advice as to habits or morals may offend his client and cost the paltry fee dependent on repeated debauchery. Is the average physician entirely ignorant of what constitutes good government or of the need of fearless, honest men to administer it, or is it because he deems it impolitic to make his influence felt for civic righteousness, because it may cost him the patronage of some arrogant member of a political machine, which deters him from taking an active part in politics?

We can point with pride to the records of many physicians who found time to devote to statecraft, beginning with our sturdy brothers Matthew Thornton, Lyman Hall, Josiah Bartlett, and Benjamin Rush, all signers of the Declaration of Independence, who have been aptly called the accouchers of the nation.

How common it is for physicians to meet disease, attributable to defective water supply or imperfect drainage yet, has the profession as a whole, sufficient grasp on the elementary principles of sanitary engineering to create intelligent public sentiment favoring better conditions? How often we attribute various physical ills to sedentary habits and overwork of business office or school, and yet how many of us know that rooms constantly occupied should have available at least 30 cu. ft. of fresh air per minute for each occupant, to keep the CO₂ down to 8 parts in ten thousand, which amount is certainly the largest allowable index of a vitiated atmosphere. If we do know these things have we made insistent attempts to improve the sanitary conditions of our schools, both public and private, of our office and other public buildings, yes, even of our homes?

Do we as a profession cheerfully meet the burdensome duties of citizenship as included in membership in various charitable, semi-public or public boards or committees and are we trying to be amongst the leaders of the best thought and work, either literary, scientific or political, of our respective communities? If we are not attentive in all these relations, to my mind, we are not living up to the best ideals, and in their neglect may be found the reason why the public is not so venerative of our profession as it was a generation or two ago.

Now, Mr. President, in thanking you for an opportunity of reading a paper before this learned body, on a subject outside of the usual sphere of scientific medicine, I wish to apologise for its crudeness and quissical aspect, yet I thought a little introspection might help keep some of us out of a rut, save us from becoming a scientific mechanism, enlarge our views of the physician's relation to civil life and aid in broadening us out into what every physician has the opportunity of being, the highest type of man.

SELECTED ARTICLES.

The Cesarean Operation Under Difficulties.

By FRANK THOMAS WOODBURY, Gandara, Island of Samar, P. I.

Captain and Assistant Surgeon, U. S. Army.

[*New York Medical Journal*, May 4, 1907.]

IN the late afternoon of December 20, 1906, a native Visayan urgently requested me to come and see his wife, who was in labor, as he feared matters were not going well. I thought that possibly a brief report of this case may not be uninteresting to the readers of the *Journal*.

Gandara is a one company post, which is fifteen miles from the west coast of the island of Samar, and is situated on a peninsula, at the junction of the east and north forks of the Gandara River, a noble stream flowing through a wild, uncultivated land of mountain and jungle. This waterway, owing to the absence of woods and even trails through the dense vegetation, is the only highway from the interior of Samar to the coast. Going on board the launch, which in our isolated position affords our only means of communication with civilisation and the outside world, I went down to Dumaloöng, which is a native barrio, or village, even more miserable in its squalor and poverty than many similar native towns in other islands. In passing I may remark that inhabitants of Samar are perhaps the most worthless, lazy, and unenterprising people in the whole archipelago. This town is merely a succession of filthy, ramshackle huts of bamboo and *nipa* (palm leaf) thatch built along the river bank in a double row. The space between is dignified by the name of street; but it is nothing save the soil worn bare of grass by the feet of pedestrians. As it rains almost all the time in Samar, the avenue is naught but a collection of bogs and sloughs, which the people hop over, or walk around, and in which the ubiquitous native razorback pig grunts and wallows. The inhabitants live upon rice, a poor variety of small fish which is usually regarded as unfit for food, a few eggs, a chicken now and then, and once in a while, as a great treat, they kill one of their half-starved pigs.

Their clothing consists of two or three garments, and also a pair of slippers, if they are well to do.

Having landed at this metropolis in the dusk of the evening, by a bamboo staging so rickety and broken that I nearly fell through, I proceeded to the house. This resembled a large barn in shape and appointments, being used as a store house for *abacá* (the famous manila hemp fibre) and *palay*, or unhusked rice.

Having fought our way through the usual crowd of cur dogs, and passed through the doorway, we encountered about fifty natives squatting in the house, smoking cigarettes and talking like a flock of parrots.

One corner of the floorspace, about eight feet square, had been screened off with matting; thus making a square room, lined inside with sheets and covered with mosquito bar. This small apartment was imperfectly lighted by an oil lamp and two coconut oil-lamps. Here I found the patient dressed in her usual clothing, consisting of a chemise and a print skirt, lying upon mats on the floor and with two native cotton pillows under her head. One woman was holding her hands, another her feet, and a man was pressing down with his fists in the pit of her stomach; while around her waist, a rope of twisted sheet had been tightly wound. This is the usual course of procedure among the Visayans of Samar when any one is sick.

Two other native men came in with the husband and myself, and all squatted sociably upon the floor around the patient. The husband, who fortunately understood Spanish, interpreted for me. I first had the windows (which were nothing but palm leaf shutters) opened, as the air was almost stifling, it was so hot. I then ordered every one out but the husband and two women, and removed the noose from the waist.

After much difficulty I learned that the woman was thirty-three years of age, and that this was her first confinement. (This is rather an advanced age for a native primipara.) The period of gestation could not be fixed, owing to ignorance of the last menstrual date; guesses were made averaging from six to twelve months. They then informed me that she had been in labor only since eight o'clock in the morning, but I learned several days later that she had been in labor thirty-six hours when I arrived.

Examination showed the anemic, fragile frame usual to native women. Lungs and heart normal, pulse a little rapid, respirations normal, breasts firm, nipples prominent with dark areolæ. The uterus extended to two finger breadths above umbilicus; fetal heart sounds were faintly audible, child in left occipitoanterior position. Vaginal examination by speculum showed a widely dilated os. The liquor amnii had escaped and the head was firmly wedged between pubis and promontory of

the sacrum. The anteroposterior diameter of the pelvis seemed smaller than normal.

As I was told that she had been in labor only about ten hours then and seemed to be in fair condition, I decided to wait and observe the pains and determine more surely if the narrowing of the superior strait was sufficient to prevent birth. My observations were cut short by the sudden onset of a convulsion. Here was a dilemma. The uterus had not once contracted forcibly during my presence, and the surroundings of the patient combined with the lack of skilled assistants, clearly showed the impossibility of obtaining asepsis; while the contracted pelvis forbade attempts at podalic version.

There was no forceps nearer than eight hours by launch, and even had this instrument been available the pelvic narrowing would have no doubt prevented its successful application. Attempts at manual traction on the head with external kneading of the uterus failed utterly. Chloroform was promptly administered at the onset of the convulsive attack, which soon produced its abatement.

A quick decision was made as a last resort to perform a Cesarean section. By this time an American teacher in the agricultural school arrived, and explained the crisis in fluent Visayan to the husband and relatives, who consented to seize the offered hope of success. Accordingly, after the priest had been summoned, the woman still partly under chloroform was wrapped in blankets, placed on a cot, and carried down to the launch by six natives. The procession created quite an excitement among the pigs, dogs, and populace.

The boat took twenty minutes to arrive at the post from whence I had been called, and the patient was immediately transferred to the small military hospital, the procession of patient, doctor, priest, and anxious relatives making a memorable picture in the tropical moonlight.

The hospital building is a long, low structure, of materials and workmanship similar to all native houses, but with an Oregon pine board floor. The rafters are bare, and the individual rooms are merely divided off from the large room by rough boards. The room used for operating was 10 feet long by 12 feet wide, and lit by an oil lamp. My only available assistants were a sergeant first-class, and two privates of the Hospital Corps. I immediately put my instruments and suture materials to boil on the kitchen stove; and also sterilised a large boiler full of water. The patient was given a hypodermic injection of atropine 1/200, strychnine 1/30 grain, which was subsequently repeated during the operation. Private Spofford, of the Hospital Corps, administered the chloroform under my direction.

The field of operation was thoroughly scrubbed with tincture of green soap, hot water, and a hand scrub brush for five minutes, then washed with alcohol and a gauze sponge, followed by hot sterile water, and finally rinsed with alcohol again. The intended line of incision was thoroughly painted with tincture of iodine from three inches above the umbilicus down to the pubis in the median line. Sterile towels were placed over the abdomen, and my chief assistant, Sergeant Doran, and I sterilised our hands by scrubbing for five minutes with tincture of green soap, hot water, followed by alcohol, potassium permanganate, oxalic acid, and finally with sterile water. The instruments now being ready, the suture material was transferred from the sterilizer to a tincture of iodine.

A median incision was made over the iodine line from two inches above the navel, to two inches above the pubis. The fundus of the uterus was delivered through the wound, the intestines being kept back by gauze pads wet with hot, normal salt solution. The uterus was then rapidly opened in a line corresponding to the muscle incision, with scissors. The placenta was found on the anterior wall. A living male child was extracted. The sergeant then firmly grasped the neck of the uterus controlling the uterine vessels. The cord was clamped, and the baby turned over to Private Betononay, Hospital Corps, who wrapped it up in a warm blanket as soon as respiration was established. The uterus was immediately emptied of placental membranes and clots, and the wound closed with continuous sutures of iodised raw silk, passing down to, but not through, the uterine mucosa. The peritoneum was closed similarly, and the abdominal parietes with interrupted iodised silkworm gut sutures by means of a Riverdin needle. A gauze dressing and abdominal binder were applied; a partial enema of normal salt solution was given, and the patient put to bed with hot blankets and hot water bottles. The entire time consumed in preparation and operation was forty-five minutes.

The patient rallied well and speedily from the anesthetic. One hour after operation the temperature was 100° F., pulse 136, respiration 36. Hot water in teaspoonful doses was allowed to quench thirst. The pulse, temperatures, and respirations reached their highest the day following, being 102° F., 137, and 34, at 3 p. m. After this, they fluctuated, coming down to normal on the eighth day and remaining so until the patient was discharged from the hospital on January 8th, the nineteenth day after operation. Atropine 1/200, strychnine 1/30 grain were given, at first every four hours, and morphine at night when needed, hypodermically. Later they were given by mouth with acetphenetidin 3 grains.

Urine was passed by catheter every four hours until the third day, and showed no albumin at any time (specific gravity 1.020 to 1.027). The bowels were kept open by enemata of magnesium sulphate ounce 1, glycerin drachms 4, oil of turpentine drops 5, in a pint of hot water, and, later, by compound aloin pills, administered on two occasions. The uterus and vagina were douched daily with Lugol's solution ounce 2, in hot normal salt solution two quarts, and the vagina packed with iodoform gauze. The day following the operation, the patient vomited a quantity of bilious fluid mixed with rice. On the second day she was allowed her first nourishment in the shape of 8 c.c. of sherry wine with 30 c.c. of beef tea, given at three hour intervals with a little sodium bicarbonate. The wound healed by first intention, and the stitches were removed in two sittings, on the twelfth and fourteenth days.

An abdominal binder made to fit and button on was applied and directed to be worn for the next eighteen months. The patient made a steady improvement from the third day. The breasts, owing to the atropine and gentle massage, gave very little discomfort; the secretion being very scanty on the day of discharge. The baby was turned over to a native woman, who volunteered to act as wet nurse. With usual native indifference, she failed to obey orders, and I did not see the infant again. Its death was reported later.

Considering the lack of facilities, the unfavorable surroundings, the gravity of the operation, the unskilled assistants, and the kind of nursing, which although most willing and painstaking, was inexperienced in this class of cases, and especially the woman's natural state of nitrogen starvation and secondary anemia (which is seen in most women in the archipelago, owing to their exclusive diet of rice and fish), the happy termination of this case seems nothing less than a triumph of modern surgery.

Concerning Amputations.¹

By MILES F. PORTER, A.M., M.D., Fort Wayne, Ind.

Surgeon to Hope Hospital; Professor of Surgery in the Indiana Medical College, Department of Medicine of Purdue University.

[*Fort Wayne Medical Journal-Magazine*, April, 1907.]

I have taken the liberty of changing the title of my paper somewhat from that given in the program, as I have desired to give myself a little wider scope than would be indicated by that title.

When, where, and how to amputate, are the questions I desire to discuss. With an increase of knowledge, amputations

¹ Read at the meeting of the Association of Wabash Railway Surgeons November 8, 1906. St. Louis, Mo.

have become more and more infrequent. Especially is this true of primary amputations. Indeed, as applied to parts of the hands or feet, primary amputations among really good surgeons may be placed among the rare operations. With proper antiseptic treatment the risk of waiting in doubtful cases is practically nil, hence it may be laid down as a rule that where there is the least chance of saving a more useful member than can be supplied by the maker of artificial limbs, amputation should not be done. In this connection it should be borne in mind that while it is possible to get a relatively useful artificial foot, the best artificial substitute for a hand is very poor. In rare cases, perhaps, the bad environment would cause one to decide in favor of amputation, but good hospital facilities are now practically always within reach, consequently the lack of them will seldom, if ever amount to an adequate excuse for doing a primary amputation in an otherwise questionable case.

The question when to amputate involves also the question as to the time of amputation, when it has been decided that amputation is necessary. When time is necessary to determine the viability of important tissues we should wait, but to wait for the subsidence of shock is worse than folly, for it adds to the discomfort of the patient, and to the risk to his life. To wait until a proper environment can be secured, by transportation or otherwise, for the proper conduct of the operation, is of course the part of wisdom.

In deciding the point of amputation (where to amputate) we should keep in mind the fact that an amputation is a sacrifice, and hence it is to be made as light for the patient as is possible. Again, in deciding this question we should remember that it is the character and quality of the tissue to be saved or sacrificed, rather than the quantity, that should concern us. To save an extremity or a part of an extremity that shall be to its possessor, during the remainder of his life, a thing of ugliness, and a curse, is to increase rather than mitigate the sacrifice.

With the improved technique of today a slight additional loss of tissue is so small a matter that it may be waived in favor of a stump better adapted to service, or to the wearing of an artificial limb.

An ideal amputation comprehends clean, straight cuts with a sharp knife, through undamaged tissues at an ideal point, re-trenchment of nerves, perfect hemostasis and coaption, proper disposition of scar, and correct flap formation, all accomplished with perfect asepsis, a minimum amount of trauma, and in the least possible time consistent with perfect work. Such an amputation wound will and should be allowed to heal before changing the original dressing. To make flaps of damaged tissue with the consequent risk of sloughing or undue formation of cicatricial

tissue is unwise except in some cases where length of stump is quite important, as, for instance, in injuries of the feet or hands where oftentimes locomotion or prehension is much improved by a slight addition in length of the stump. Irritable and painful scars are often due to unnecessary cicatricial formation, consequent upon the use of damaged tissue in the flaps. However, I do not want anything I have said on this subject to be taken as a warrant for unnecessary sacrifice of tissue, especially in hand injuries and diseases, and more especially where there is a loss of part of the member, making each bit of that which is left, exceptionally valuable to the patient.

In making finger flaps, it may be wise to shorten the member somewhat for the purpose of getting a long palmar flap, with an idea of preserving the tactile sensibility.

Drainage is an acknowledgement of imperfect work or materials, and hence, except in rare cases, inadvisable.

Sutures are sometimes necessary but should be dispensed with when not necessary, which is often the case. In a way we may say all sutures are bad, through and through sutures the worst, buried, absorbable sutures the best. Buried non-absorbable sutures left permanently are inexcusable. Ordinarily a very few sutures to coapt the muscles are all that are required. A very common error is the too tight tying of sutures. They should coapt, not strangulate. Very frequently the most perfect coaptation may be made by the proper adjustment of the dressings and adhesive without a single suture. The advantages of coaptation by adhesive and disposition of dressings, is that the coaptation thus secured is more perfect and yet not so tight as to interfere with the egress of secretions from the wound, while the trauma and infection-atria are reduced to a minimum, thus lessening the danger of infection. Moreover, this method of coaptation conduces to the comfort of the patient, and minimises the scar formation. This latter is of less importance in amputations than in surgery of the face and neck, but is worthy of note.

A NEW BLOOD TEST.—Max Einhorn, (*Medical Record*, June 8, 1907.) describes a new test for blood in the stomach contents, feces, and urine. It consists of testing with paper sensitised by the use of benzidin. The paper is immersed in the solution to be examined, and a few drops of peroxide of hydrogen are added, when a blue color is formed if blood is present. The blue or green color appears in a few seconds; and we should not wait more than a minute for the reaction to appear, as after that the color may appear from the presence of other substances than blood. HCl may cause the reaction after two or three minutes. The benzidin test can be recommended as a preliminary test: a strong reaction or no reaction at all gives a reliable test.

ABSTRACTS.

Treatment of Sciatica.

By E. S. McKEE, M.D., Cincinnati.

THE following is taken from the *Monatschrift fuer Orthopaedische Chirurgie und physikalische Heil—und Untersuchungsmethoden*, No. 4, April, 1907, beilage zu *Deutsche Medizinische Zeitung*, 25 March, 1907, of Berlin, under the title *Behandlung der Ischias* von Dr. E. S. McKee, Cincinnati, and is abstracted from the original in *Blatter fuer Klinische Hydrotherapie*, February, 1907, of Vienna.

First a calomel purge, then salts; in constitutional disease as soon as possible introduce treatment for the cause, caution with morphine; in rheumatic cases, salicylate preparations; in syphilis, iodides; in gout, colchicum and saline mineral waters.

Hypodermic injection of sterilised air. First sterilise the immediate cutaneous region, then insert a sterilised Pavas needle into the skin and connect with a thin rubber tube, which is again connected with a glass tube containing a bit of sterilised cotton, and then one drives by means of a rubber balloon the air slowly under the skin. Naturally, care must be taken that the Pavas syringe needle be not run into a bloodvessel which easily occurs. Gentle massage should follow this procedure till the air is all absorbed. The rest cure of Wier Mitchell is in some cases very successful, especially in those where their means of livelihood has been an active one. Massage along the nerve though quite painful often breaks up adhesions, which are the cause of the disease in many instances. It is a rule however, that in true neuritis, massage is not followed by good results. Massage and especially mechanic vibrations are of special worth in chronic cases with beginning atrophy.

Hydrotherapy systematically used deserves due consideration. The wet pack over night diminishes the pain remarkably as well as having a favorable influence on the neurotic process. The next morning the leg is unpacked, washed with warm water and massaged. Ten or twelve of these applications are usually sufficient. In subacute cases the half steam bath is of service. Patient sits in a steam container which reaches only above the hips. This half steam bath does not weaken the patient and allows of a higher temperature; 44°C. can be endured for 10-15 minutes without discomfort. Afterward the patient is put in a bath of 35°C. for eight minutes and douches the diseased hips with water at 40 to 44°C. This procedure can also be combined with swimming baths and very often the drinking of large quantities of water is advisable.

Electrotherapy. Galvanic current direct on the nerves 4-8 minutes, highest 3 to 5 milliamperes. Also the interrupted galvanic current stimulates the muscles in a mild way, holds the tissues in a good condition and prevents atrophy. The static (Franklin) douche with positive pole on the painful part is followed by good results. The apparent anodyne action of faradism in sciatica is due to its alterant action on the muscular tissue and through that on the circulation. The current should not be increased to painfulness.

Surgical treatment.—In long standing cases one is often led to make an exploratory incision, lay the nerve bare, and separate some adhesions. In bloody nerve stretching, we find good and bad experiences. This operation is directly contraindicated where neuritis is present as in these cases myelitis not infrequently follows. There is also a so-called bloodless nerve stretching wherein the patient is under ether, the thigh is forcibly flexed on the hip-joint with the leg extended at the knee which position is maintained for some minutes.

The cure is easier when the patient is not too old and does not suffer from other diseases. The principle thing in the treatment consists in the careful observation of the patient, so that nothing is overlooked. The physician shall at once in the beginning commence with a systematic cure and if it does not go forward seek for his failure, for failure lays somewhere certainly. Exact diagnosis of the condition of the patient is the first and last means of treatment.

Therapeutic Uses of Glycerophosphates.

C. D. F. Phillips, M.D., London, late Lecturer on Materia Medica at Westminster Hospital and Examiner in Aberdeen University, writing on "The Physiological Actions and Therapeutic Uses of Phosphorus and Some of its Compounds," says that the glycerophosphates are now extensively employed and appear to have a distinct sphere of usefulness. Discovered in the yolk of egg in 1846, they were but little known till 1893, when Robin drew attention to the large amount of partly oxidised phosphorus in the form of glycerophosphoric acid eliminated in the urine of some neurasthenics. He administered compounds of this acid and found that they increase the general metabolism of both organic and inorganic matter, principally the latter, as shown by the augmented excretion of urea, chlorides and sulphates, though not of uric acid or phosphates. They favor the current assimilation of albuminoid matters and moderate denutrition of the nervous system, adding its reconstruction by remaining in the body. They have a wide range of employment,—

chronic gout, diabetes, phthisis, Bright's and even Addison's disease with nutritive decay, to improve the vital powers rather than to directly combat such maladies; similarly, any nervous breakdown, as in the aged or after acute illness; chlorosis, rachitis; chronic dyspepsia, especially with lessened acidity (after appropriate treatment); and neuralgia, ataxia, sciatica, spermatorrhea and neurasthenia generally when marked by depression, headache and impaired mental and muscular strength. Robin said insomnia, palpitation and phenomena of excitement may be exaggerated (this is not Phillips's experience) and that the medication is not suitable in conditions of azoturia or when organic oxidations are above normal, or in mental disease or general paralysis. They are beneficial in muscular atrophy from various causes and in diphtheritic paralysis.

Harris pointed out that a priori it is probable that the glycerophosphates act as foods to the nervous system. They favor assimilation and metabolism. The best results are obtained in nervous exhaustion from overwork, in which they really have good effect.

Professor Wild, of Manchester, uses glycerophosphate of soda for weakness following influenza and for nervous exhaustion from overwork and Dreschfield finds it useful in many functional diseases.

Modern Treatment of Masculine Gonorrhea.

Stock, of Cologne, reviewing the modern treatment of masculine gonorrhea (*Medico*, 1907, No. 7), emphasises the importance of internal medication. A purely local treatment is often unsatisfactory and cannot be used continuously when complications are present. Of the internal remedies he prefers arhovin because, though vigorously antigonorrheic, it is free from the untoward effects of the balsams. Arhovin internally alone is indicated in acute anterior urethritis with intense inflammation, pain on urination and swelling of the meatus. It is also a complete substitute for specific medication when complications have arisen, such as epididymitis, cystitis, inflammation of the urinary tract. In chronic gonorrhea it is sometimes astonishingly effective.

Zorn of Bruenn also lauds arhovin as our very best internal antigonorrheic and details a number of cases of anterior and posterior urethritis, acute urethrocystitis and chronic gonorrheal cystitis in which strikingly convincing results were obtained (*Fortschritte d. Medicin*, 1906, No. 34). In vulvovaginitis he also employed arhovin bougies and in fluor albus gonorrhoea arhovin globules, with much satisfaction. In fluor albus the

course of the disease was not shortened visibly, but the analgetic effect of the arhovin was gratifying.

Administration of Blood Salts.

Privy Councillor Senator says in the *Russische med. Rundschau*, Jan., 1907, that antisclerosin is the simplest and most convenient method of administering the blood salts, the use of which is based on the work of Dennstedt-Rumph and Ludwig Weil. The antisclerosin tablets contain chiefly sodium chloride, with sodium sulphate, sodium phosphate, sodium carbonate, magnesium phosphate and calcium glycerophosphate,—all in about the proportion in which these salts are normally present in the blood. The initial dose is two tablets daily and is gradually increased to six tablets daily. If the dosage is slowly raised, antisclerosin is well borne. Though the casual relation of salt impoverishment of the blood to arteriosclerosis is not yet wholly explained, salt impoverishment is certainly an abnormal condition. The careful use of antisclerosin can only be of benefit.

The Treatment of Phthisis Night Sweats.

By Dr. Wilke, *Medico*, 1906, No. 52. The old remedies for nocturnal sweats in phthisis act only symptomatically. Since the sweats must be regarded as a biochemic reaction of the organism against the invasion of the blood stream by toxic substances, a causal remedy must be able to depoisn the bacterial toxins and thus remove the entire symptom-complex,—the chills in the afternoon, the evening fever and the night perspiration. A priori, such an effect is to be anticipated from collargolum, as it has been shown that it acts katalytically on bacterial products.

Five phthisis patients in the second stage, with severe cough, mucopurulent expectoration and heavy night sweats, four of whom had moderate or high fever, received a tablespoonful of a 1% collargolum solution four times daily. After the use of $\frac{1}{2}$ dram collargolum, fever and sweats disappeared and have not returned to this date, two months later. The importance of this result with reference to nutrition and strength is evident. When severe enteritis hinders absorption, inunction or intravenous injection of collargolum is preferable to its use by mouth. Collargolum does not act upon localised pus foci; therefore its use also has diagnostic value.

Collargol in Various Affections.

In a paper read before the San Angelo District Medical Association (*Texas State Journal of Medicine*, March, 1907), Dr. I. L. Von Zandt of Fort Worth reviews some of the publications

on collargol and records his own experience with it in septicemia, scarlatina, phlebitis, erysipelas, bubo, paronychia, acute salpingitis and exacerbations. He also gave it in 13 cases of typhoid fever, with an average of 19.8 days from the first to the last visit. This includes one with intercurrent pneumonia and two who suffered a set back from excitement and overeating. In two cases the temperature had fallen to 99°; when the remedy was discontinued, the temperature remained stationary for a few days and then again rose till collargol was resumed, whereupon fever disappeared in three days. In most cases there was marked improvement with general well-being in two or three days after beginning the treatment, the fever some times coming to a very abrupt termination.

Influenza Treated with Pyrenol.

Dr. M. Steiner writes from the Ducal Hospital and Sanitarium at Altenburg (Director, Privy Councillor Neutzenadel) that a remedy for influenza must meet three requirements: (1) it must effect subjective improvement, i. e. depress temperature and relieve pains; (2) it must be innocuous; and (3) it must as far as possible prevent complications. He applies these tests to pyrenol (benzoyl-thymyl-sodium-benzoyl-oxy-benzoate), which has lately been recommended for influenza in about thirty publications.

That pyrenol is antipyretic and analgesic must be conceded. Thus, reports from the Augusta Hospital in Berlin and the General Hospital in Vienna show that its antithermic effect is slow and steady, accompanied by subjective betterment; there is no exhausting diaphoresis under its use, as there is with antipyretics which act suddenly and rapidly. As to innocuousness, hardly a single writer fails to record the improvement in the appetite and the general absence of gastrointestinal disturbances under its use. The sphygmometric experiments of Cowl showed total absence of any untoward action; to the contrary, the drug is a cardiotonic,—a most valuable property in influenza. Nor does pyrenol ever irritate the kidneys.

Steiner's own observations with pyrenol began in 1903, were especially numerous in the epidemic of 1904-5, and were confirmed in the autumns of 1905 and 1906. He has records of 86 cases treated with pyrenol and 20 control cases which got other treatment. Cases in the prodromal stage of influenza took 15 grains pyrenol thrice daily or 7½ grains six times daily: when the patient could not swallow tablets, 5% solution was given. If symptoms were already well developed and severe, the dose was 15 grains four times daily or half the dose every three hours,

given until the first signs of improvement occurred and then reduced to 45 grains daily, and continued till he got out of bed. Cardiac lesions, nephritis or liver trouble were no contra-indications.

The third test of pyrenol is the absence of complications. Of the patients seen in the prodromal stage the great majority remained under treatment only for from a few days to a week; and not one developed pneumonia. In almost all pyrenol was the only treatment required. In the first two days large hot compresses were applied for two hours twice daily to the trunk to promote diaphoresis, and pyrenol seemed to do especially well under this treatment. Vigorous rubbing of the body after the sweating seemed to put the patient in good condition for some hours.

Of the patients seen only when the malady was already advanced, pneumonia was positively diagnosticated in eight. The dose of pyrenol was usually increased by 15 grains daily, to control fever and pain more rapidly. There was not a single death. As temperature and pulse were kept in moderate bounds, the subjective symptoms were bearable and the course of the disease was very favorably modified. Cough during the febrile stage was treated exclusively with pyrenol.

Pyrenol was very helpful in the influenza of children. In young subjects almost all antipyretics, even in small doses, are apt to depress the temperature to subnormal, with collapse lasting perhaps for hours; so we are glad to have a remedy which slowly and gradually lessens the fever and does not depress the heart. Children from six months to eight years got, in accordance with age, one or two teaspoonfuls of a 2 to 4% pyrenol solution in raspberry syrup, three or four times a day. Its anti-febrile action lasted longer in children than in adults, so less frequent administrations were necessary.

To conclude: pyrenol in influenza depresses the fever gently and gradually, with very light sweating and an increase in the general well-being. It relieves the pains in the joints, muscles, tendons and fasciæ, as well as those of the pleural and intercostal nerves. It is a powerful expectorant, loosening the mucous and diminishing secretion.

In the *Berliner Klin. Wochenschr.*, Feb. 11, 1907, Dr. Braeunig refers to Steiner's paper and adds that it tells nothing new, for the beneficial effect of pyrenol in influenza and pertussis is well known. Braeunig also found it to do good service in these cases, as well as in the hectic fever of phthisis in which—given at the right time—it forestalls the high evening temperatures without causing the annoying diaphoresis which follows other antipyretics.

SOCIETY PROCEEDINGS.

The Medical Association of Central New York.

Minutes of Thirty-ninth Annual Meeting of the Medical Association of Central New York, held in the Academy of Medicine Room in the Carnegie Library, Syracuse, N. Y., on Tuesday., October 16, 1906.

REPORTED BY C. A. GREENLEAF, M.D., Secretary.

EDITED BY WILLIAM C. KRAUSS, M.D.

THE meeting was called to order at 10 o'clock by the president, Dr. D. M. Totman, of Syracuse, in the following words.

Members of the Medical Association of Central New York: It gives me great pleasure to welcome this association today and in this building. I would like particularly to call your attention to the library building and to offer, through the courtesy of the librarian, the unlimited use of the library during this meeting. You are all cordially invited to visit the art rooms, the library, and in fact the whole building. The secretary's report is now in order.

The secretary: Inasmuch as the secretary's report is printed in full in the Transactions, I move that the reading of it be omitted. Seconded and carried.

The treasurer's report was presented by Dr. Brown as follows:

05 Oct.	24	Cash on hand.....	\$319.39
		Dues collected	168.00
			Total \$487.39
Disbursements			
05 Oct.	24	Journal Publishing Co.....	\$ 28.00
		C. A. Greenleaf, stamps.....	25.00
		C. A. Greenleaf, salary.....	10.00
		C. A. Greenleaf, sundries.....	10.41
		W. C. Krauss, postage.....	3.00
	Oct. 31	F. W. Parkhurst, stenographer.....	40.20
06 June	23	C. A. Greenleaf, clerk hire.....	7.80
	July 26	C. A. Greenleaf, envelopes and stamps.....	25.00
	Sept. 17	A. T. Brown Printing House.....	75.00
		17 Journal Publishing Co.....	5.00
	Oct. 15	W. M. Brown, stamps exchange.....	4.96
			\$234.37
06 Oct	16	Bal. on hand.....	\$253.02
Accepted and placed on file.			

The names of the members of the committees were read by the secretary, as follows:

ENTERTAINMENT.—D. H. Halstead, Syracuse; A. E. Larkin, Syracuse; Frederick Flaherty, Syracuse.

CREDENTIALS.—L. W. Rose, Rochester; C. E. Congdon, Buffalo; W. S. Cheeseman, Auburn.

BUSINESS.—C. O. Boswell, Rochester; H. A. MacGruer, Syracuse; Charles E. Low, Pulaski.

ETHICS.—A. A. Young, Newark; F. S. Crego, Buffalo; Elias Lester, Seneca Falls.

PUBLICATION.—Wm. C. Krauss, Buffalo; C. A. Greenleaf, Canoga; W. M. Brown, Rochester.

"President's Address" was read by Dr. David M. Totman, Syracuse. (See p. 321. January number.)

Dr. Hersey G. Locke, Syracuse, read a paper entitled "Responsibility in Mental Diseases."

Dr. Charles E. Low, Pulaski: I feel it would only be justice on the part of the business committee to introduce a resolution favoring the discussion of both these papers. I am sorry we did not have further time to devote to Dr. Locke's original and valuable paper as well as to the president's address. I therefore move that Dr. Angell be tendered the privilege of discussing these papers at this time.

Dr. E. B. Angell, Rochester: I rise to a question of personal privilege, in the first place, for myself, and in the second place for the president. In the first place, it is not usual to discuss the president's paper. I believe it should be referred to a committee, which should report this afternoon. Unfortunately I did not arrive in time to hear the president's paper, and I should be very glad to read it before discussing it. Therefore, I move that the president's paper be referred to a committee of three, to report after luncheon. Seconded and carried.

The president appointed Dr. E. B. Angell, Dr. Frederick Sefton and Dr. H. G. Locke as such committee.

Dr. Rose then read a paper entitled "Abscess of the Brain, Operation.—Death. Report of Case."

Dr. W. B. Johnson, Batavia: I would just like to say a few words about brain abscess and make some remarks about another case that I operated on. When I first saw the man he was in a condition of complete coma, and had not spoken a word or swallowed a mouthful for three days. The only symptom of focal irritation was referable to the Rolandic area. Spasmodic contractions of the levator ani were present. The man was in such a condition that I began to operate without anesthetic. I made a five-eighths inch trephine of the bone over the lower opening of

the Rolandic fissure. The abscess was the size of a walnut. Then the man began to recover consciousness and we gave chloroform to finish the operation. He opened his eyes and I said "How do you feel?" He said "Bully." That was the first word he had spoken in three days. He died that night. We performed an autopsy. On taking off the skull cap I found that the abscess was at the very lowermost portion of the Rolandic fissure, and the cavity was caused as much by separating as by a destruction of the brain tissue. In the second case the peculiar feature was, that when I trephined, nine days after the injury, I removed a piece of his hat and a piece of bone. He was having all this time an epileptic form of convulsions. The lesion was on the right side of the brain. The convulsions still kept up. We started the operation without chloroform, he was so comatose. The convulsions kept up at three minute intervals. So sure was one of my associates that the lesion was on the opposite side of the brain, that I simply ran my knife across the scalp and examined the skull over the corresponding area on the other side. There was no visible lesion of the bone there, and the man got well. His epileptic symptoms ceased after three days, and he is now well, three years after the operation.

The president: We have with us today a very welcome visitor in the person of Professor Burt G. Wilder, of Cornell University. We are all familiar with the fact that Professor Wilder has been taking various brains as he can get them. I am sure I voice the sentiment of all when I extend to him the hearty welcome of this association.

Dr. Wilder then read a paper entitled "The Medical Profession and the Simplified Spelling."

Dr. William S. Cheeseman, Auburn, presented a specimen for the examination of the members of the association, and spoke as follows:

"Presentation of Specimen of Sarcoma of Kidney, weight $4\frac{1}{2}$ lbs., removed from a child aged twenty months." This is a tumor weighing four and a half pounds which I removed from a child twenty months old. The tumor does not represent its original size: it has shrunk in the preserving fluids until it is not more than two-thirds its original size, if it is as much. The really formidable appearance of the mass is I think shown by the sketch which I will pass around. The history of this case, to be very brief, is this: The mother first observed in this infant a varicocele of the right side. That was the first symptom. Gradually the parents became aware that the abdomen was slowly enlarging. They thought nothing of it, thinking it was an accumulation of fat, but it was not very long—in fact, the tumor at the time it

was removed was only of two months' growth—until the abdomen was filled from side to side by a very large mass.

On examination this mass was elastic—I could not say fluctuating, but elastic—and of course flat from one side of the abdomen to the other, intestines being displaced to the left. The vague history led me to believe that the tumor must have swung from the right side. There was no pain. The child had fits of crying, but they seemed to be more from irritability than anything else. At no time was there found any blood or albumin in the urine. Particles of growths are often found in the urine, and that is usually a most characteristic feature. Nothing of that sort occurred in this case. The appearance of the urine was throughout entirely normal. I was strongly inclined from the very first to regard the case as one of sarcoma of the kidney. The pathology of these growths is not, I believe, very clearly laid out; that is to say, it is considerably unsettled as to the exact pathology of many of them. Some of them are mixtures of sarcoma and carcinoma, and others with other forms of growth. The greatest interest in the case to me centered in the technique of the removal of the growth. The child was thin, but not emaciated, and quite pale, but not remarkably anemic. The lips were still red.

The very first question which arose, of course, was that of the choice of access to the growth. Dr. Abbe, in his reports of several cases of extirpation of tumor, has preferred to use the side incision opening from the line of the umbilicus, around to the back. He published a photograph of the child after the recovery showing the scars. In thinking the matter over it seemed to me that incision had many disadvantages, among which was cutting of muscle fibers and weakening of the abdominal muscles. The other incision is around the front of the abdomen, and reaching the tumor from the front. I chose that incision, going through the right rectus muscle. The abdomen was split from the ribs to the pelvis through the right rectus muscle. This gave me access to the growth. Of course the tumor was there covered by the posterior layer of the peritoneum. The large intestine overlaid the growth from above down. The incision was made on the outside of the large intestine in order to avoid destroying the vascular supply of the colon.

The operation in itself was not one of great difficulty, but the greatest difficulty encountered was found in the hemorrhage which occurred in separating the posterior layer of the peritoneum. It took very little pressure to control this bleeding, but as rapidly as possible the peritoneal surface was dissected off with the fingers and finally the kidney itself reached and the mass delivered through this incision. It reminded me of nothing so

much as delivering the head of a fetus. It came out finally by pressure of both sides. It was a matter of no difficulty at all to remove the growth. By this time of course the child was very much shocked. I would say that the recovery was an uneventful one, to my surprise, as I really expected nothing but death. The child became ravenously hungry in a few days, and looks well now. Of course the ultimate result of this case is, I am afraid, a dark prognosis. The statistics are very discouraging as to the ultimate recovery.

Dr. William D. Johnson, Batavia, read a paper entitled "A Case of Pancreatic Cyst."

Dr. W. L. Wallace, Syracuse, read a paper entitled "Intestinal Resection; a Rapid and Safe Method."

AFTERNOON SESSION.

The president announced that the first business of the afternoon is the election of officers for the ensuing year. It was moved and seconded that the association proceed to the election of a president.

Dr. Jacobson: It has been the custom of this society since time immemorial to elevate to the presidency the first vice-president. Dr. W. B. Jones, of Rochester, is first vice-president at the present time, and it affords me great pleasure to present his name for the office of president for the next year. Seconded by Dr. Charles A. VanDerBeek.

It was moved and seconded that the secretary cast the ballot of the association for Dr. W. B. Jones for president for the ensuing year. The secretary cast the ballot as directed and the president declared Dr. Jones elected president for the ensuing year.

The president then called for nominations for the office of first vice-president.

Dr. Krauss: I would like to nominate for first vice-president a gentleman with whom most of you are acquainted, and a man who has attended nearly all the meetings of this association, a man very popular in Buffalo and all through western New York. I refer to Dr. Carlton C. Frederick of Buffalo. Nomination seconded.

It was moved and seconded that the secretary cast the ballot of the association for Dr. Frederick for first vice-president. Carried. The secretary then cast the ballot as directed and the president declared Dr. Frederick elected first vice-president for the ensuing year.

The president called for nominations for second vice-president.

Dr. Henry L. Elsner, Syracuse: I nominate Dr. Pascal M. Dowd of Oswego. Nomination seconded.

The secretary cast the ballot under instructions by vote and the president declared Dr. Dowd elected second vice-president for the ensuing year.

The president called for numinations for secretary. It was moved and seconded that the president cast the ballot of the association for Dr. Greenleaf for secretary for the ensuing year. Carried.

The president cast the ballot of the association for Dr. Greenleaf for secretary for the ensuing three years.

The president called for nominations for treasurer.

Dr. C. O. Boswell: I nominate Dr. William M. Brown for treasurer for the next ensuing three years. Seconded.

Dr. Low moved that the secretary cast the ballot of the association for Dr. Brown for treasurer for three years. Seconded. Carried.

The secretary cast the ballot as directed, and the president declared Dr. Brown elected treasurer for the next ensuing three years.

The secretary read the list of names presented for membership in the association as follows:

The president: You have heard the names proposed for membership, as read by the secretary. What is your pleasure?

Dr. Henry L. Elsner, Syracuse: I move that the secretary cast the ballot of the association in favor of these candidates. Motion seconded and carried.

The president declared the candidates elected members of the association.

Dr. Thomas Jameson, Rochester, then read a paper entitled "Pyloric Obstruction."

Dr. Jones, Rochester: It is quite true that almost all hopeless cases go through a long period of suffering, of gradually aggravated symptoms, of gradually aggravated treatment, by many physicians as a rule. Nearly all the cases that do come to something more radical show by their pathology that there has been long periods during which there was a chance for relief, and in almost all of the cases, including cancer, there have been long periods in which absolute cure was possible; and the attitude of those who are responsible for this in each individual case is terribly near to that of an ignorant man who wastes precious moments. The patient comes to a table, the operation being a success in every respect technically, and yet the patient's vitality is too far exhausted for good results, living a couple of weeks, and perhaps dying of marasmus. During this period of ineffectual treatment all sorts of laboratory tests are made, if the attendance has been at all intelligent, and many times with great benefit, and

also many times being entirely useless. I would like to narrate to you a case where some of the best diagnosticians in the world could not make out whether a certain case was ulcer of the stomach or possibly cancer. On the operating table it proved to be cancer. After this the diagnosis was "probably ulcer," but as a precautionary measure microscopical diagnosis was made, when it proved unquestionably cancer, and was treated as such.

Dr. Allen A. Jones, Buffalo: I am glad Doctor Jones has brought the question of the case up, because it emphasises an important phase of that which has heretofore been considered an entirely medical subject, that is, hypochlorhydria. Until within recent times medical men were quite justified in treating hypochlorhydria as a medical affection, but experience has led some of us to regard with suspicion many cases of hypochlorhydria. These cases of hypochlorhydria, some of them are extremely resistant to treatment, obstinate, not yielding, and usually lead a patient rather an irksome existence. Recently I saw one in a young man who had been suffering sometime, about a year, from the so-called hypochlorhydria, and at operation pregastric lesions were found from the pregastritis, which, upon being loosened and undergoing proper treatment completely relieved his symptoms. We did not find any thickening of the gastric wall in or near the pylorus, and therefore the stomach was not opened. The man was relieved. I have seen a number of cases with gallstones, and, on the other hand, some cases of partial stagnation—at all events, delay in the passage of the food from the stomach into the duodenum, and many gastric symptoms.

Dr. Henry L. Elsner, Syracuse: It appears to me that no subject could be presented to a body of general practitioners of greater importance than the one touched upon in this paper. If our modern methods of diagnosis establish anything in connection with gastric diagnosis it is the fact that these cases are surgical, that they should be so regarded, that the diagnosis can be made with ease, and that medical treatment avails nothing. Now, it matters little whether you have an intragastric or an extragastric stricture, there is no medicine known to the profession today which will give you a sufficient motor strength to empty that stomach and overcome the obstruction. The stomach tube, or even a thorough examination, will readily make the diagnosis; and there is no disease in which the stomach tube will aid so much as in this very condition,—obstruction at the pyloric end of the stomach. The leading symptom, the condition which is always present, is stagnation, and when stagnation persists, from whatever cause, and medical treatment, tried only a very short time, avails nothing, the case should be turned over to the surgeon.

Now, that is safe teaching. I have reached that conclusion as the result of some experience, painful at times, and I believe that the physician today must teach that as a fact just as positive as anything in medicine. It may be that the pendulum has swung too far in the direction of the surgeon, but the truth of the matter is that these benign strictures can only be treated by surgical means, and as such I believe the profession must recognise them as surgical cases from beginning to end.

Dr. I. Levy, Syracuse: I think we ought to emphasise the importance of the motor function. For a long time the stomach tube was used simply to determine the amount of hydrochloric acid. As to the question of pepsin, I believe that is of less importance than the motor question. The tube should be employed, not only in the morning when the stomach is empty, but should be used also six hours after the meal, and if stagnation exists then it is a sure sign the stomach is not emptying itself properly and there is some disturbance of the motor function.

Dr. A. B. Miller: One point Dr. Elsner failed to make clear is that while the surgical procedure is not always successful in the benign instances, the majority of the cases where they are recognised early would never reach the malignant stage. They would be relieved by the surgical procedure before malignancy intervened. In connection with the capacity of the stomach, the author of the paper took the wind out of my sails when he said his patient's stomach held a little more than a gallon. I operated on a case for pyloric obstruction where the stomach was washed out and the capacity was a pint less than a gallon. The patient said to me that had he thought if it made any difference he could have taken another pint. This man was simply a shadow, and today he is a man weighing 150 pounds. At the time of his operation there were berry seeds in his stomach. As he had not eaten any berries in ten days before that time, it showed that the seeds had been there that length of time. The shock does not seem to be severe in these cases. I reported a case before the Syracuse Academy of Medicine of an individual who simply was obliged to be carried into the hospital on a cot, unable to walk, who underwent the shock of operation. She took on flesh and was enabled to do her daily work, and even conceived after that, a year or two before her death. In that instance the stomach symptoms were entirely relieved, and instead of dying a death of starvation she died from another cause.

Dr. E. B. Angell, Rochester: The committee appointed to consider the recommendations of the president's address in relation to expert medical testimony respectfully submit: That it unqualifiedly approves of the effort to solve this difficult prob-

lem in medico-legal ethics, but that careful consideration of the method proposed compels the reluctant conclusion that it would be unconstitutional, and therefore impossible of application. The constitutional right each contestant has to present all his evidence in his own way would preclude the application of such measures as proposed in the president's address.

Your committee would suggest a thorough discussion of this important subject, to the end that the profession at large may become better acquainted with the abuses associated with the present method of introducing medical testimony, and the need for reform in the direction of a "square deal."

Respectfully submitted,
EDWARD B. ANGELL,
FREDERICK SEFTON,
HERSEY G. LOCKE.

Dr. Nathan Jacobson then read a paper entitled "Extensive Gangrene resulting from Contact with a Live Wire," and presented a case for the inspection of the society.

Dr. Henry L. Elsner read a paper entitled "Leaflets from Clinical Records."

Dr. Charles E. Low read a paper entitled "Physician—Civilian."

Dr. William C. Krauss, read a paper entitled "The Need of a Trained Microscopist in Every Community."

Dr. Charles O. Boswell read a paper entitled "The Leukocytes in Surgical Infections."

Dr. Allen A. Jones, Buffalo: The chief point, as illustrated by Dr. Boswell, is the slight value of leukocytosis in certain cases. We must not be guided by the blood findings so far as to be misled in cases. Doctor Boswell illustrated in his paper how leukocytosis was present with a gangrenous appendicitis, and it falls to the lot of most of us to see such cases. One case comes to my mind of gangrenous appendicitis with leukocytosis of nine thousand. So that a leukocytosis, while it is valuable, taken in connection with all other clinical manifestations, should not be allowed to mislead us.

Dr. M. M. Lucid read a paper entitled "Epiphyseal Separation of the Ends of the Humerus."

Dr. L. W. Rose, Rochester: The splint mentioned is not Dr. Moore's splint for the traction or extension treatment of the upper fracture of the humerus. It was designed by Dr. Swinburne, of Albany, some years ago, and is known as the Swinburne splint. From the description that Doctor Lucid gave I think that was the Swinburne splint instead of Dr. Moore's splint. He designed no splint for the upper end of the humerus.

He designed a mode of reduction for fractures of the upper end of the humerus, which was supreme abduction, and they were dressed in this position (indicating). In the matter of diagnosis and treatment of fractures of the lower end of the humerus, I think one is pretty safe in their treatment if they do not make any diagnosis, if they use an anesthetic and make supreme traction, flexion, supination and pronation. When you can do that with your elbow grasped with the other hand, and you can do it under an anesthetic, and then putting the arm in that position, without any splint at all; you do not need any splint, using the Jones method of suspension—and you will get most beautiful results. The family will be shocked and they will probably tell the neighbors that the doctor didn't think there was any fracture because he didn't put a splint on; but after taking that method of reduction and using the halter, called the Jones halter, you have traction there, and your body is a good splint. You do not need any sling—if you use a sling you will have trouble. Then you can get an x-ray, and no man is safe in a fracture without an x-ray picture. That is the only thing to protect the surgeon.

Dr. Albert L. Beahan, Canandaigua, read a paper entitled "A plea for the Earlier Diagnosis of Appendicitis."

The president: The following paper is upon the same subject, and we will listen to that before discussion is had of this paper.

Dr. Luzerne Coville read a paper entitled "A Case of Appendicitis and an Autopsy."

Dr. Jacobson: It seems to me these papers have brought up matters of interest and present a number of points we ought to emphasise at this time. In the first place, as to matter of diagnosis. Every surgeon is, so to speak, in the hands of the physician who calls him into the case, as the early diagnosis made by the medical attendant is many times responsible for the successful work of the surgeon, and a late diagnosis is quite as often responsible for the fatal termination of the case; but with all that we may sometimes be called to a case early and may not succeed in our work and have a happy termination of the case. Now, we have a certain picture before us of classic symptoms upon which we will sometimes seek to depend in making a diagnosis; but I want to say right here that we find the greatest difference between the clinical manifestations many times and the pathological conditions.

I had occasion to present this subject to our society a few years ago, and I have been impressed with that. A physician sent a case into our hospital in the spring in which practically

there were no well defined acute manifestations. The tenderness was mild, the rigidity was minute, the pain was not great, the man was not vomiting. He had a history of recurring attacks of appendicitis, but we found a very high leukocyte count with a large percentage of cells. We operated and found gangrenous appendicitis. You will find many times that discrepancy, an advanced conditions of things, with a moderate clinical picture. I had occasion to operate on a child within a few weeks, who was well at midnight, taken sick about one o'clock in the morning, brought in about six, and I operated at seven, and found a strip of omentum wound around the appendix, causing the most intense manifestations. In that particular case I found a few hours made a greater difference than in an average case several days would have made. I have found that a condition that does not yield at once to medicinal treatment is a surgical case of appendicitis.

For a long number of years I was ready to admit that there was a group of cases of appendicitis that were medical, but I am growing to the conviction that I cannot tell what cases belong to that class, and that for that reason I believe that safety lies in regarding all as being surgical. Now, I cannot say with Dr. Beahan that every case of appendicitis that is unruptured and in which there is no peritoneal complications is sure to get well after operation. We see, unfortunately, this is not the case, and we cannot always determine why this is not the case, but Dr. Dowd knows of a case where we operated on a physician not long ago where we had a gangrenous appendicitis, and where everything was deemed pure, and everything progressed apparently satisfactorily for forty-eight hours, but the patient died. The autopsy did not reveal any explanation of that physician's death. The physician had been refused for life insurance a year before because of a renal condition, but there was nothing after his operation which suggested that he had any renal disease.

Dr. F. W. Sears: My experience bears out the idea that you should not let your pregnancy interfere with your operation. Your mother and child will do better before rupture. I have operated on five pregnant women, and they have stood the operation better than the non-pregnant women. I operated on one a week ago today, and she has not shown the slightest trouble. Don't allow a pregnant woman to go on to rupture; attend to it at once.

Dr. C. C. Frederick: I do not believe there is a diagnostician living when he takes a case of appendicitis that can give the course of that case for the next twenty-four hours, or forty-eight or seventy-two hours, he doesn't know anything about it. Put

fifty cases right along side by side, apparently equally severe, and probably not more than two or three of the fifty will follow the same course. Therefore I say, after an abundant experience, that in the early part of an attack of appendicitis, as soon as the diagnosis is made, it is far safer to operate than it is to wait, for you never know how the case is going to go. It may turn out to be simply a catarrhal attack, you may have a rupture in forty-eight hours with a general peritoneal attack, and you never know. Get them out and then you have them out for all time, because the patient is probably going to have a recurring attack, and you have got to take it out ultimately.

Dr. W. B. Johnson: The plea for an early diagnosis is the most important plea we can make in appendicitis, and I rely most upon symptoms and an understanding of what those symptoms mean. The first symptom is pain, and the cause is the contraction of the appendix trying to rid itself of foreign material. If it succeeds, good; if not, bad. The second is nausea. That is the reflex nausea of abdominal pain. The third is tenderness, and that is the tenderness of the sore appendix, the disease in which has penetrated to the peritoneal fold. The fourth is the temperature caused by absorption. When you get these four symptoms you can operate in ninety-nine cases out of a hundred and be right. I don't dare to operate until I get temperature. You usually get it in the first twelve hours. Dr. Sears spoke of operating on pregnant women. I operated on four in one year. Not one of them aborted or had bad symptoms. Dr. Beahan speaks of having a series of cases with one death. I had sixty-four cases with two deaths, but in the next two I had two deaths, which made it four deaths in sixty-six.

Dr. William M. Brown, Rochester, read a paper entitled "Version or High Forceps?"

Dr. Snow: I don't think Doctor Brown need to apologise for the paper. It is a most excellent paper, and I desire to emphasise what he says. There is only one point where I disagree with the technique the doctor gives, and that is in the eclampsia. Formerly I lost quite a number of cases, and I realised that I lost them through inability to get the head quickly. In the cases where we get them in seven or eight months the head is large in proportion to the body. For the last three or four years I have adopted a method of dilating the cervix as well as I can and applying the forceps and delivering in that way; and I am able to say that all the children, where they have been a period of eight months or longer, you can deliver more slowly and with more safety to the child in that way, and with just as much safety to the mother, if it is done in the method the doctor has described. In only one case of eclampsia have

I used the forceps. That is a case during the present year where the woman was badly exsanguinated. After carefully thinking it out I thought I could put on my forceps quickly and manipulate the uterus less by using the forceps. As the child was dead I thought the mother would perhaps stand the forceps, and we fortunately saved the mother.

Dr. Low: Dr. Congdon wished his paper read by title. It is entitled: "Abdominal Section for Trauma of the Uterus. Puncture of non-peuperal Uterus with Prolapse of Bowel; Violent Seisure and tearing away of sixteen inches of Gut; immediate abdominal section, repair of uterus, lacerations, intestinal anastomosis, recovery."

Dr. M. E. Gregg, Elbridge, read paper entitled "Conservatism in Modern Therapeutics."

Dr. I. H. Levy, Syracuse, read a paper entitled "Achyilia Gastrica."

Dr. Jones, Buffalo: The association of achyilia gastrica and carcinoma is interesting. As a rule it has not been my custom to confuse achyilia gastrica with carcinoma. Regarding the nervous cause of achyilia, some years ago my associate, Dr. Stockton, and I called attention to the fact that many of these cases present a peculiarly aggravated atrophy. We argued that a long functional disturbance might finally lead to a structural defect. In 1893 I published a paper on this question, shortly following Einhorn's paper, and noted in that paper a few cases that were studied for some years afterwards; and before the meeting of the American Medical Association of 1897, I read a paper on the association of achyilia gastrica with chronic diarrhea. The association of chronic diarrhea and achyilia is interesting, and the diarrhea demands in the way of treatment the proper diet and proper medicines, taken, I mean, in relation to the gastric condition. I believe, though, that there is an associated chronic atrophic enteritis in these cases from prolonged and overworked conditions of the intestines. It is a very interesting paper.

The president: Gentlemen, I wish to thank you all for the courtesy you have shown during the day, and I bespeak for the next meeting, which is to be held in Rochester a year from now, probably a better meeting even than we had today. The meeting last year in Buffalo was one of the most successful I have ever attended of the association, and we have sought to do as well as we can by you today here in Syracuse, and I hope our efforts have not entirely failed. There being no further business to be transacted, I declare this meeting of the association closed.

Meeting adjourned to meet in Rochester next year.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 238 DELAWARE AVE., BUFFALO, N. Y.

VOL. LXII.

JULY, 1907.

No. 12

The University of Buffalo.

THE sixty-first annual commencement of the department of medicine, twentieth annual commencement of the department of pharmacy, nineteenth annual commencement of the department of law and the fourteenth annual commencement of the department of dentistry of the University of Buffalo occurred in the last week in May,—too late for an account of the exercises to appear in the June issue of the JOURNAL. We, however, published then the program of commencement week, embracing the meeting of the Alumni association, the clinics held under the auspices of that organisation and the commencement exercises proper, the latter being held at the Teck theater Friday, May 31, at 11 A. M.

ALUMNI ASSOCIATION.

THE Alumni association of the medical department held its thirty-second annual meeting during Tuesday, Wednesday, Thursday and Friday, May 28, 29, 30 and 31, 1907. On Tuesday evening the business meeting was held at Alumni hall, the exercises beginning with a reception by the medical faculty at 8 o'clock. After the routine business was transacted, including the election of officers, and the reunion of the classes of '47, '57, '67, '77, '82, '87 and '97, the faculty and the officers held a reception. At 9 o'clock, vice-chancellor Charles P. Norton addressed the assemblage, his subject being, "Why Buffalo is destined to become a university center." At 10 o'clock supper was served in the library.

The following named officers were elected for the ensuing year: president, Allen A. Jones, Buffalo; first vice-president, F. H. Van Orsdale, Belmont; second vice-president, George A. Himmelsbach, Buffalo; third vice-president, Charles L. Preisch, Lockport; fourth vice-president, N. Victoria Chappel, Buffalo; fifth vice-president, F. H. Stanbro, Springfield; treasurer, Her-

man K. DeGroat, Buffalo; secretary, Franklin W. Barrows, Buffalo.

The next three days, Wednesday, Thursday, and Friday, were given over to clinics in accordance with the schedule announced in the June issue of the JOURNAL. On Wednesday evening, May 29, the Buffalo Academy of Medicine held a special meeting to which the alumni were invited. Class dinners, smokers, and theater parties served as pleasant entertainments during the evenings of the week.

UNIVERSITY DAY.

THE sixty-first annual commencement of the department of medicine, the twentieth commencement of the department of pharmacy, the nineteenth commencement of the department of law, and the fifteenth commencement of the department of dentistry were held at the Teck theater, Friday morning, May 31, 1907, at 11 o'clock.

Vice-chancellor Charles P. Norton occupied the chair, and among those present on the stage were the orator of the day, Dr. Jeremiah Whipple Jenks, A. M., Ph. D., LL. D., professor of political economy and politics at Cornell University; Dr. Matthew D. Mann, dean of the medical department; Dr. Carlos C. Alden, dean of the law department; Dr. George B. Snow, dean of the dental department, and Dr. W. G. Gregory, dean of the department of pharmacy.

Prayer was offered by the Rev. George B. Richards, after which the Hippocratic oath was administered to the graduates in medicine by the dean of the university, Dr. Matthew D. Mann.

The graduates in medicine were:

Anderson, L. Franklin, Buffalo; Baker, Edwin Adams, Machias, N. Y.; Bishop, Vernon Leslie, Lakeville, N. Y.; Burkhardt, Frederick William, Buffalo; Carpenter, Frank Milton, Charlotte, N. Y.; Costello, William Francis, Buffalo; Davis, Charles Louis, Fowlerville, N. Y.; Davis, George Gibbs, Rockglen, N. Y.; Divins, George Graham, Buffalo; Eckel, George Joseph, Perrysburg, Ohio; Eckel, John Leonard, Perrysburg, Ohio; Edson, Ray Arthur, Crittenden, N. Y.; Flemming, Theodore Ernest, Buffalo; Foster, James Byron, Webster, N. Y.; Goodale, Albert Wilford, Angola, Ind.; Haley, James Charles, Buffalo; Hirsch, Richard, Buffalo; Hoeckh, John G., Buffalo; Hogan, Thomas Gannon, Buffalo; Hovey, Walton, Hilton, N. Y.; Howe, Harlan J. O., Phelps, N. Y.; Hurley, Patrick Joseph, Buffalo; Jackle, Arthur Frederick, Dunkirk, N. Y.; Jehle, Harold Peter, Buffalo; Knapp, Ralph Hiram, Youngsville, Pa.; Knell, Louis J., Buffalo; Kraemer, Edward Henry, Buffalo; Krombein, Louis Henry, Buffalo; Kurek, Leon Sebastin, Buffalo; Lath, Eugene M., Brockport, N. Y.; McGee, Hugh Joseph, Buffalo;

Mallory, Melvern Louise, Albion, N. Y.; Manchester, Ward Beecher, Batavia, N. Y.; March, Clara A., Buffalo; Marvin, Hubert Burns, Springwater, N. Y.; Merle, Elizabeth Helena, Attica, N. Y.; Metzger, Frederick G., Watertown, N. Y.; Mills, Raymond William, Buffalo; Morse, Roscius, Jr., Buffalo; Piper, Arthur Lewis, Buffalo; Puerner, George William, Buffalo; Pulver, Arthur LeRoy, Prattsburg, N. Y.; Regan, Alfred, Buffalo; Reynolds, George Welcome, Buffalo; Rhodes, Eli A., Williamsville, N. Y.; Richter, Maximilian Allen, Buffalo; Schuhr, Harry Charles, Buffalo; Smith, George Ernest, Buffalo; Smith, Herbert A., Fowlerville, N. Y.; Smith, Lawrence Henry, LeRoy, N. Y.; Staub, Richard John, Clarence, N. Y.; Tinkler, John, Jr., Deposit, N. Y.; Walker, Alexander, Jr., Auburn, N. Y.; Welch, Bennet Thomas, Buffalo; Wendel, Elmer John, Buffalo; Will, Emery Fred, Batavia, N. Y.; Wise, John Magee, Groveland Station, N. Y.; Wood, Julia Nettie, West Falls, N. Y.; Zimmerman, George Franklin, Allanburg, Can.

The usual formula was observed by vice-chancellor Norton in conferring the degrees.

George Franklin Zimmerman, of Allanburg, Canada, won the honors of the class in medicine, 1907. Prizes were also awarded in the departments of law, pharmacy, and dentistry. The exercises were interspersed with music and the distribution of flowers. The commencement address was delivered by Professor Jeremiah W. Jenks, A.M., Ph.D., of Ithaca, who occupies the chair of political economy and politics at Cornell University. Professor Jenks chose for his subject, "The modern standard of business honor." It is needless to state that the speaker received the plaudits of the assemblage at many apt points made during his discourse and was given the "grand rounds" at its close.

At the conclusion of the commencement exercises, Dr. Carlos C. Alden, dean of the law department, gave a luncheon at the University Club in honor of Dr. Jenks. The guests numbered about twenty and were men identified with the university, including Justice Alfred Spring, Justice Charles B. Wheeler, Vice-chancellor Charles P. Norton, Dr. Matthew D. Mann, John B. Olmstead, Henry R. Howland and John Lord O'Brian.

DR. H. E. HAYD, of Buffalo, recently brought suit against the White Sewing Machine Company of Cleveland, for professional services in attending Webb Jay, who was seriously injured in the automobile races at Kenilworth Park two years ago. It appears that Dr. Hayd was employed by the president of the White company to attend Jay, but afterward denied it as far as liability was concerned at least, hence the suit.

After a two days trial before Justice Truman J. White and a supreme court jury, Dr. Hayd was awarded a judgment of \$400. The principle involved is one of importance to physicians, and Dr. Hayd is to be congratulated upon his successful prosecution of the employing company.

THE Regents of the University of the State of New York, held a special meeting, May 29, 1907, and appointed the nine members of the State Board of Medical Examiners provided for in the new law consolidating the former three boards of examiners into one. The appointees are Drs. William Warren Potter and Lee H. Smith, of Buffalo, and W. S. Searle of Brooklyn, for terms of three years; Drs. W. S. Ely, Rochester; Eugene Beach, Gloversville, and Floyd M. Crandall, New York, for two years, and Drs. Frank W. Adriance, Elmira; Floyd S. Farnsworth, Plattsburg, and Ralph H. Williams, Rochester, for one year. The Regents chose Dr. Maurice J. Lewi of New York, the present secretary of the joint medical boards, as secretary of the new medical board.

Of the members of the new board Drs. Potter, Ely, Beach and Crandall are allopaths; Adriance, Searle and Farnsworth are homeopaths; Dr. Smith is an eclectic and Dr. Williams is an osteopath. Drs. Potter, Ely, Beach, Searle and Smith were on the old board of which Dr. Potter was president.

The Regents re-elected Dr. O. J. Gross, of Schenectady, and Dr. Frank French, of Rochester, as dental examiners.

DURING the recent session of the legislature, Senator Henry W. Hill, of Buffalo, succeeded in having added to the supply bill two appropriations of interest in this city. One was an item of \$5,000, for the completion of the McKinley Monument, and the other is an item of \$18,000 for continuing the work of the Gratwick Cancer Laboratory. Senator Hill received valuable assistance in this matter from Assemblyman Patton.

THE American Medical Association at its recent annual meeting held at Atlantic City, elected the following named officers for the ensuing year: president, Dr. H. L. Burrell, of Boston; first vice-president, Dr. Edwin Walker, of Evansville, Ind.; second vice-president, Dr. Hiram R. Burton, of Lewes, Del.; third vice-president, Dr. G. W. Crile, of Cleveland, Ohio; fourth vice-president, Dr. W. B. Stewart, of Atlantic City; secretary, Dr. G. H. Simmons, of Chicago; treasurer, Dr. Frank Billings, of Chicago; members of the board of trustees, Dr. T. J. Happel, of Tennessee, Dr. W. W. Grant, of Colorado, and Dr. Philip Marvel, of New Jersey, all reelected. The next meeting will be held at Chicago.

PERSONAL.

DR. JAMES WRIGHT PUTNAM, of Buffalo, one of the associate editors of the JOURNAL, and a former president of the American Neurological Association, will sail for Europe, July 5, on the Red Star liner Menomene, from Philadelphia. Dr. Putnam will attend the International Congress of Neurology, Psychology and Psychiatry at Amsterdam, September 2-7, 1907, having been specially invited by the president of the congress.

DR. IDA C. BENDER, of Buffalo, will attend the international congress of school hygiene, to be held in London, August 5-10, 1907, as Buffalo's official representative. The education department of Buffalo was officially invited to send a representative by Sir Lauder Brunton, the president of the congress, and Dr. Bender was chosen as the official delegate. She will endeavor to have the congress hold its next session in Buffalo.

DR. EDWIN WALKER, of Evansville, Ind., was elected first vice-president of the American Medical Association at the annual meeting held at Atlantic City in June, 1907. Dr. Walker is one of the most prominent physicians in the southwest, and has been an active scientific worker in the association for many years.

DR. WALTER BLACKBURN DORSETT, of Saint Louis, was elected chairman of the section on obstetrics and gynecology of the American Medical Association during its recent meeting held at Atlantic City. This is a deserved recognition of able and efficient service rendered the section by Dr. Dorsett for many years.

DR. C. W. BOURNE, of Hamburg, was elected medical director of the Grand Army of the Republic, department of New York, at the recent annual encampment at Utica. Dr. Bourne served as a surgeon of a Vermont regiment during the civil war and is a companion of the Military Order of the Loyal Legion.

DR. JOSEPH DECATUR BRYANT, of New York, recently received the degree of Doctor of Laws from the New York University. Dr. Bryant is the reigning president of the American Medical Association having taken office at the recent meeting of that body held at Atlantic City.

DR. WILLIAM SEAMAN BAINBRIDGE, of New York, received the degree of Doctor of Science at the annual commencement of the Western University of Pennsylvania, June 7.

DR. CHARLES F. HOWARD, of Buffalo, has been nominated by Governor Hughes to be a member of the prisons commission created by a law recently enacted. His term of service is four years.

DR. W. J. O'DONNELL, of Buffalo, received the degree of M.Sc. from St. Bonaventure's college and seminary at its forty-seventh annual commencement held in June, 1907.

DR. AUGUSTUS GROTE POHLMAN, of Bloomington, Ind., has recently been appointed junior professor of anatomy at Indiana University. Dr. Pohlman is a graduate of the University of Buffalo, class of 1900.

OBITUARY.

William Robertson Campbell.

AT the thirty-second annual meeting of the Alumni association of the medical department of the University of Buffalo, the death of the president of the association, Dr. William R. Campbell of Niagara Falls, was announced by the chair, who appointed as a committee to prepare a memorial, Drs. Ernest Wende, Charles G. Stockton, and Benjamin H. Grove. Subsequently the following memorial was reported by the committee, which was unanimously adopted by a rising vote.

IN MEMORIAM.

Dr. William Robertson Campbell, of Niagara Falls, entered into rest April 9, 1907, after an illness of a few months. His brief career was, from its incipency, one of fulness and activity, and his early demise was such as not only to cause the deepest grief, but to invite attention and reflection.

He was born in New York City, April 7, 1854, but his boyhood was passed in Canada where he received his academic education. Early in life, at St. Catherines and Drummondville, he was engaged in commercial pursuits, but his taste and instinct soon caused him to abandon them. The university called him; he wisely obeyed; and the practice of medicine became his chosen profession. His name occurs on the commencement day program, February 25, 1880, with a thesis on "Dropsy." After receiving his degree, he located at Niagara Falls and soon associated himself with Dr. Gardener C. Clark, which relation, full of self-sacrifice and of answering affection, continued up to the latter's death a few years ago. His medical career was distinctively successful, and he applied himself to it in conformity with the highest ideals and most advanced standards. He was a member of the leading

societies—president of the Niagara Falls Academy of Medicine; member of the Buffalo Academy of Medicine; for many years, a curator of the University; and, but for his untimely death, as our presiding officer he would have augmented the dignity, the energy, and the prosperous impulse of this eventful occasion. He found his duty, likewise, in the service of the state, serving as Assistant Surgeon to the 42d Separate Company from which he was promoted to Assistant Surgeon of the 1st Battalion of the New York State National Guard.

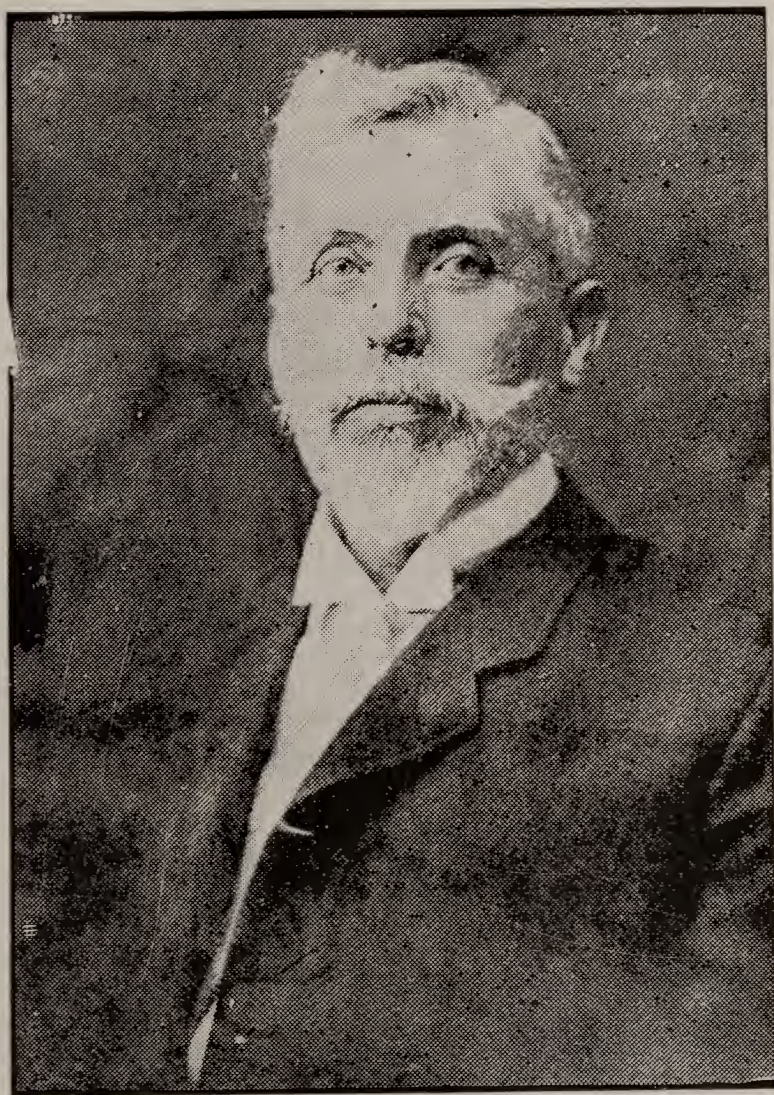
His private practice was large, and was characterised by skill of high order, and his sympathy and benevolent consideration of the poor, the humble, and the suffering was as generous as it was sincere. The impression made upon all who knew him was that of the *true* physician. The regularity and persistency with which he prosecuted his calling; his extremely modest and unassuming bearing; his cordial helpfulness and kindness to all who consulted him; his entirely unselfish nature; and the absolute purity of his life and motives were characteristics which marked his whole course.

In man, there are regions more fertile and profound than those of intelligence and reason, and these were manifested not only by the qualities already referred to but by a sense of justice and deep feeling for humanity: and the compassion which pervaded his entire make-up was exceptionally sensitive and responsive to the finer instincts, and extended conspicuously to the love of dumb animals. He was an active member of the Society for the Prevention of Cruelty to Animals. The dumb animals had, in him, a sympathetic friend who felt and thought for them. Compassion with him meant action: and, as has been stated in the press, could they but speak, how deep and profound would be their expression of gratitude.

The noble thoughts that come to all men,—“thoughts that pass across the heart like great white birds,”—were not dismissed by him: on the contrary, they found expression in action and deeds which marked his gentler disposition. His life was one of earnestness; not a day was trivial: and it was part of him, and he lived in it, strengthening his ideals to the ultimate good of his fellow-man in whom he inspired more than ordinary affection, as well as esteem. “His patients loved him,” is often said of medical men. In his case, it could be said “it was a self-evident fact.”

As a citizen, he enjoyed the confidence of his fellows, and contributed largely to the progress of his city. His energy and many sided ability enabled him to give considerable time to other interests. He was foremost in advancing the industrial welfare of the locality: was made president of the Niagara County Home Telephone Company: a director in the Union Long Distance Tele-

phone Company; president of the New York State Independent Telephone Association; president of the Citizens Lumber Com-



WILLIAM ROBERTSON CAMPBELL, M. D., 1854—1907.

pany; and besides which he was the proprietor of the Niagara Pharmacy. In all these, his personality was felt, and success followed his endeavor.

His illness, which began in December, 1906, determined an operation which revealed what had been predicted, a necessarily fatal malady. Throughout the suffering, his fortitude was commensurate with his character, though he loved life as few did.

A pathetic incident with it was his desire to live his fifty-third birthday which, owing to his strong will, and through the skill, affection and devotion of his attendants, he was fortunately enabled to do.

Taken all in all, Dr. Campbell was a noble personality; his keen moral sense, high ideals and practical sympathetic humanity were part of him. He has left his imprint upon all that came to him in life, and his memory will be cherished by all who knew him.

Our friend's physical presence has left us, but his spirit remains reinforced and multiplied. So could be truly said, that with him it was not enough to possess the truth but that the truth possessed him.

ERNEST WENDE, *Chairman*,
CHARLES G. STOCKTON,
BENJAMIN H. GROVE.

DR. ORRIN A. TOMPKINS, of Randolph, N. Y., died at his home June 11, 1907, aged 66 years. He was a graduate of the University of Buffalo, medical department, class of 1865, and for many years held an enviable reputation as a prominent practitioner of medicine in the community in which he lived.

SOCIETY MEETINGS.

THE Medical Society of the County of Erie, held its regular June meeting at the rooms of the Society of Natural Sciences, Buffalo library building, on Monday, June 17, 1907, at 4 P.M. Dr. A. H. Briggs is the president and Dr. F. C. Gram is the secretary.

THE Buffalo Academy of Medicine held meetings in May and June as follows:

Section on Obstetrics and Gynecology.—Thursday, May 30, at 8:30 P.M. Program: Fibroid tumors of the uterus in pregnancy, labor and puerperal state, Matthew D. Mann, Election of officers of the section.

Annual Meeting of the Academy was held Tuesday, June 11, at 9 P.M. Election of officers from 8 to 9 P.M. Meeting of the council at 8:30 P.M. Program: President's Address, Charles S. Jewett.

THE Sixth International Dermatological Congress will be held at New York, beginning September 9, 1907, and continuing for one week, under the presidency of Dr. James C. White, of Boston. Dr. Grover W. Wende, of Buffalo, is a member of the organisation committee and Dr. John A. Fordyce, 80 West 40th street, New York, is the secretary-general.

THE Eleventh Antialcoholic Congress will be held at Stockholm, July 28, 1907. The Swedish government through its state and educational departments has taken full control of the congress, and formally invited every country in Europe, including the United States and Canada, to send representatives and eminent persons interested and acquainted with the subject. The state department at Washington has appointed as delegates for the government, Surgeon-General O'Reilly, U. S. Army and Medical Inspector Beyer of the Navy, Drs. T. D. Crothers of Hartford, Conn., and T. A. McNicholl of New York, to represent the medical profession and Mr. B. A. Hockhart of Hartford, to represent the temperance organisations and the Swedish people of this country.

THE American Association of Obstetricians and Gynecologists will hold its twentieth annual meeting at Detroit, Tuesday, Wednesday, and Thursday, September 17, 18 and 19, 1907, under the presidency of Dr. Robert Tuttle Morris, of New York. Drs. J. H. Carstens, H. W. Longyear and W. B. Manton, all of Detroit, compose the committee of arrangements. An interesting program is in preparation.

COLLEGE AND HOSPITAL NOTES.

THE Buffalo General Hospital Training School for Nurses held its annual commencement exercises Tuesday evening, June 11, 1907.

The graduating class was composed of the following-named: Annie E. Munro, Florence P. Phillips, Catherine MacDonald, Laura Mildred Margaret Conlin, Jennie Scott Brewer, Ethelwyn E. Harris, Catherine Louise Campbell, Annie Gillespie, Annie Knox, Christine W. Fritz, Margaret E. Chapman, Nellie Jean Tench, Claire May Free, Beula Marmion Shaw, M. Sydna Sheldon, Catherine L. Burns, Emma Butler, Elizabeth Crysler and Estelle L. Cott.

The Reverend Robert Guthrie Freeman, pastor of the Lafayette Avenue Presbyterian Church, made the address, congratulat-

ing the school on its 28th commencement. Charles W. Pardee, president of the board of trustees, presented the diplomas to the class and Dr. William C. Krauss gave the school pins to the young women.

The annual commencement exercises of the Nurses' Training School of the W. C. A. Hospital, Jamestown, N. Y., were held Monday evening, May 27, 1907. The principal addresses were given by the Reverend Dr. Hickman and Dr. H. A. Eastman.

The graduates were Harriette M. Bray, Mrs. Cora B. Barnard, Mary C. Anderson, Mrs. Eliza McLellan, Alba E. Nethercott and Seruda Mitchell.

BOOKS AND AUTHORS.

Atlas and Textbook of Human Anatomy. Volume II. By **Professor J. Sobotta**, of Wurzburg. Edited, with additions, by **J. Playfair McMurrich**, A.M., Ph.D., Professor of Anatomy at the University of Michigan, Ann Arbor. Quarto, 194 pages, containing 214 illustrations, mostly in colors. Philadelphia and London: W. B. Saunders Company. 1906. (Cloth, \$6.00; half morocco, \$7.00, net.)

The simplest and best way to begin a notice of this volume is to say, as does the author, that it is a continuation of the atlas and textbook of human anatomy as begun in the first, and deals with the viscera including the heart. He further states that this arrangement seemed desirable because the heart is usually dissected in common with the other viscera.

One of the most striking features of this excellent work is the quality of the illustrations. In no previous work on human anatomy has the engraver's art been brought to such perfection, nor has printing in color been so artistically applied. In the notice given of the first volume published in the issue of the *JOURNAL* for February, 1907, we gave some prominence to this feature of Sobotta's work, all of which we reaffirm with emphasis, and may apply it with still more cogent force to the illustrations of the viscera. Take, for example, the figures relating to the pancreas, 392 and 393, and we fail to understand how they could depict with greater accuracy this interesting organ. We could repeat this statement with reference to all other viscera dealt with in the book, but it is quite unnecessary to do so.

The text is, also, most interesting in its dealings with the various organs of the body. One example will suffice. Sobotta divides the digestive tube into three sections,—the foregut, the midgut, and the endgut. The foregut includes the pharynx, the esophagus, and the stomach. The midgut is the small intestine, and the endgut is composed of the large intestine and rectum. The work must be found in possession of every anatomist.

BOOKS RECEIVED.

Laboratory Manual of Invertebrate Zoology. By Gilman A. Drew, Ph.D., Professor of Biology at the University of Maine. 12 mo, pp. 201. Philadelphia and London: W. B. Saunders Company. 1907. (Price, \$1.25.)

Clinical Lectures on Neurasthenia. By Thomas D. Savill, M.D., Lond., physician to the West-End Hospital for Diseases of the Nervous System, London. Small 8 vo., pp. 216. New York: William Wood and Company, 1907. (Price, \$1.50.)

Nephritis. A Manual of Bright's Disease and of Allied Disorders of the Kidneys, by Seelye W. Little, M.D. 12 mo., pp. 134. New York: The Grafton Press. 1907. (Price, \$1.25.)

Report of the Commissioner of Education for the year ending June 30, 1905. Vol. 1. Washington: Government Printing House. 1907.

The Standard Family Physician, by Dr. Carl Reissig, of Hamburg, Germany, Dr. Smith Ely Jelliffe and others; 2 volumes; large 8 vo.; illustrated. New York and London: Funk & Wagnalls Company. 1907. (Buckram binding, \$15.00 per set, three quarters morocco, \$20.00, net.)

Progressive Medicine, Vol. 1, No. 2, June, 1907. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Armory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 381 pages, with illustrations. Lea Brothers & Co., Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00, carriage paid to any address.)

Gynecology and Abdominal Surgery. Edited by Howard A. Kelly, M.D., Professor of Gynecologic Surgery at the Johns Hopkins University, and Charles P. Noble, M.D., Clinical Professor of Gynecology, at the Woman's Medical College, Philadelphia. Imperial octavo, vol. 1, pp. 851. Illustrated by Hermann Becker and others. Philadelphia and London: W. B. Saunders Company. 1907. (Price, \$8.)

American Practice of Surgery. A Complete System of the Science and Art of Surgery by representative surgeons of the United States and Canada. Edited by Joseph D. Bryant, M.D., and Albert H. Buck, M.D., New York. Complete in eight volumes. Vol. III. Imperial octavo, pp. 775, illustrated. New York: William Wood & Company. 1907. (Price, cloth, \$7.00.)

The Principles and Practice of Dermatology, by William Allen Pusey, A.M., M.D.; Professor of Dermatology in the University of Illinois. Octavo, pp. 1021. Illustrated. New York and London: D. Appleton & Company. 1907. (Price, \$6.00.)

Manual of Disease of the Nose, Throat, and Ear. By E. B. Gleason, M.D.; Clinical Professor of Otology in the Medico-Chirurgical College of Philadelphia. 12 mo. pp. 556. Illustrated. Philadelphia and London: W. B. Saunders Company. 1907. (Price, flexible leather, \$2.50 net.)

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vols. 1, 2, and 3, General Medicine, Surgery, Eye, Ear, Nose, and Throat. Series 1907. Chicago: The Year Book Publishers. (Prices, \$1.25, \$1.50, \$2.00; entire series, \$10.00).

LITERARY NOTE.

THE special June number of the *Annals of Surgery* received notice in this department of our June issue. The July number of the *Annals* will also be a special issue containing seven papers on "End Results Following Operation for Carcinoma of the Breast," which were discussed at the recent meeting of the American Surgical Association at Washington. Among these will be a remarkable paper by Dr. Halsted of Johns Hopkins Hospital. There will also be eight other valuable contributions by eminent specialists in addition to the reports of the transactions of the New York Surgical Society.

ITEMS.

DR. S. A. KNOPF'S International prize essay, entitled "Tuberculosis as a Disease of the Masses and How to Combat it," a notice of which we published in the June issue of this JOURNAL, page 713, can be obtained from the publisher, F. P. Flori, 514 east eighty-second street, New York, also at Charities, 105 East twenty-second street, New York. The price, paper bound, is twenty-five cents; cloth, fifty cents. We make this announcement at the request of Dr. Knopf.

THE State Civil Service Commission will hold examinations July 13, 1907, to fill among others the following positions: Assistant in clinical laboratory, Manhattan State Hospital, \$900 and maintenance; medical inspector of factories, \$2,400; superintendent of State School for the Blind, \$2,500 and maintenance; trained nurse, state institutions (men and women), \$420 to \$600 and maintenance; woman physician, state hospitals and institutions, \$1,000 and maintenance.

The last day for filing applications for these positions is July 6. Full information and application forms may be obtained by addressing the chief examiner of the commission in Albany, Charles S. Fowler.

INDEX TO VOL. LXII.

AUGUST, 1906—JULY, 1907.

	PAGE
A BORTION, criminal, and illegitimacy	416
following use of diachylon	420
Accidents, report of required	621
Achylia gastrica	655
Address to graduates	1
Adrenalin solutions in hay fever	55
Air we breathe	339
Amblyopia, monocular hysterical	673
American Association for Advancement of science	295
medicine, leading men and events in history of	40
Medical Association of- ficers	755
Amputations, concerning	730
Andrews, Champe S., safeguards to protect people from quack doctors	98
Anemia and incipient tuberculosis, treatment by hypodermic medication	537
Anesthesia, eucaïn in rectal diseases	551
Anesthetics, local, in operations on chest and abdomen	131
some new local	83
Antisclerosin and blood salts	624
Appendicitis, observations on 500 operations for	146
plea for earlier diagnosis of	384
Arteriosclerosis, treatment of	480
Articulations, the pelvic	93
Attack on physician, unfounded	622
Automobiles in New York	698

B EAHAN, A. L., plea for earlier diagnosis of appendicitis	384
Bedouins in Africa	698
Bier's passive congestion treatment	91
Bile duct, obstruction of the common	228
Birchmore, Woodbridge Hall, end of the season illness	201

	PAGE
Birchmore, Woodbridge Hall, logic of the situation	455
Blenorrhœa, treatment of in women	548
Blindness, prevention of unnecessary	491, 493
Blood salts, administration of	736

Books and Authors :

Ashton: Textbook of gynecology	125, 639
Attfield: Manual of chemistry	578
Austin: Clinical chemistry	642
Bacon: Manual of otology	512
Baile: Textbook of histology	513
Bailey: Diseases of nervous system from traumatism	244
Bainbridge: Operative gynecology	310
Bernays: Golden rules of surgery	310
Billings: Modern clinical medicine, vol. 3	370
Bishop: Ear and its diseases	574
Blakiston: Physicians' visiting list, 1907	303
Bovee: Practice of gynecology	241
Brickner: Surgical suggestions	306
Brown: Eczema	310
Bryant: American practice of surgery, Vol. 1, 301; vol. 2,	568
Bulkley: Diseases of skin and internal disorders	121
Bulkley: Menstrual function and diseases of skin	66
Burr: Primer of psychology and mental disease	579
Butler: Materia medica, therapeutics, etc	244
Cabot: Case teaching in medicine	305
Carr: Pediatrics	369
Chance: Treatment of bodily deformities	66
Coleman: Syllabus of materia medica	644
DeLee: Obstetrics for nurses	440

	PAGE		PAGE
Directory of New York, New Jersey and Connecticut, 1906	639	Koplik: Diseases of infancy and childhood.....	123
Dorland: American illustrated dictionary	575	Landis: Compend of obstetrics	309
Einhorn: Diseases of the stomach	436	Lea: Practitioners' visiting list, 1907	371
Ellis: Demonstrations of anatomy	123	Leffman: Medical chemistry.....	127
Ellis: Psychology of sex, vol. 5	639	Lippincott: International Clinics, 16th series, vol. 2, 305; vol. 3, 368; vol. 4, 571; 17th series, vol. 1.....	707
Emerson: Clinical diagnosis.....	437	Lusk: Science of nutrition....	643
Fischer: Care of baby.....	366	Manton: Human embryology.....	578
Forchheimer: Treatment of internal diseases.....	366	Marks: Artificial limbs.....	641
Fowler: Operating room and patient	125	Massey: Gynecology and therapeutics	706
Fowler: Treatise on surgery....	179	McConnell: Manual of pathology	642
Friedenwald: Diet in health and disease.....	573	Mendel: Textbook of psychiatry	635
Fruhwald: Diseases of children	242	Morrow: Care of injured.....	640
Gould: Biographic clinics, vols. 4 & 5.....	708	Morris: Materia medica, etc.....	126
Gould: Operations on stomach and intestines.....	638	Morton: Genitourinary diseases and syphilis.....	434
Gould: Practitioner's medical dictionary	641	Moynihan: Abdominal operations	574
Grayson: Diseases of nose, throat and ear.....	513	Northcote: Christianity and sex problem.....	176
Hampton-Robb: Nursing	120	Osborne: Materia medica and pharmacology	307
Hare: P.ogressive medicine, vol. 8, no. 2, 246; no. 3, 303; no. 4, 369; 1907, vol. 1.....	708	Parke: Human sexuality.....	303
Harvey lectures.....	510	Pattee: Practical dietetics	577
Head: Practical Medicine Yearbooks, 1906, vol. 1, general medicine, 243; vol. 2, general surgery, 243; vol. 3, eye, ear, etc., 307; vols. 4-5, gynecology, obstetrics, 372; vol. 8, materia medica, etc., 576; vol. 7, pediatrics and orthopedic surgery, 577; vol. 6, general medicine, 578; vol. 9, anatomy, physiology.....	579	Paul: Nursing in acute infectious fevers.....	247
Hertzmann: Urinary analysis, etc.	119	Pedersen: Medical Epitome Series; Materia medica and therapeutics (Kiepe) 373; Pathology (Stenhouse).....	575
Hirsch: Genitourinary diseases and syphilis.....	375	Peterson: Practice of obstetrics	705
Hirst: Textbook of obstetrics.....	641	Potter: Materia medica and therapeutics	311
Hill: Normal histology.....	643	Powell: Pocket medical formulary	644
Howe: Muscles of the eye, vol. 1.....	564	Prieswerk: Atlas of dentistry.....	642
Jennings: Hygiene of pregnancy	763		
Keen: Surgery, vol. 1.....	367	Reports :	
Kelly: Walter Reed and yellow fever.....	394	Commissioner of Education, 1904	637
Keimper: World's anatomists.....	247	Department of health, Buffalo, 1905.....	373
Kilmer: Physical examination of children	126	Henry Phipps institute, 1905.....	309
		State board of health, Michigan, 1904.....	303
		State commission in lunacy, N. Y., 1904.....	179
		Surgeon-general public health and marine hospital service, 1905	309

	PAGE
Reed: Diseases of stomach and intestines	511
Rockwood: Manual of physiological chemistry.....	67
Sachs: Nervous diseases of children	122
Schmidt: Test diet and function of the intestines	245
deSchweinitz: Diseases of the eye	245
Shoemaker: Materia medica and therapeutics	576
Sobotta: Atlas of human anatomy, vol. 2.....	762
Sobotta: Atlas and textbook of anatomy, vol. 1.....	439
Sollmann: Textbook of pharmacology	642
Squibb: Materia medica.....	308
Starr: Nervous diseases.....	636
Stengel: Textbook of pathology	642
Stevenson: Photoscopy	438
Stevens: Motor apparatus of the eyes.....	371
Stoney: Materia medica for nurses	643
Theobald: Prevalent diseases of the eye.....	435
Thorington: The ophthalmoscope	124
Thorington: Retinoscopy.....	643
Thornton: Dose book and prescription writing.....	440
Thornton: Pocket medical formulary	372
Thornton: Pocket medical formulary	641
Tigerstedt: Textbook of physiology	572

Transactions :

American Gynecological Association, 1905.....	246
American Laryngological Association, 1905, 127; 1906.....	644
American Medico-Psychological Association, 1905.....	304
American Roentgen Ray Society, 1905.....	305
American Surgical Association, 1905, 67; 1906.....	638
Medical Association State of Ala	308
Section on Obstetrics and Diseases of Women, A.M.A., 1905, 308; 1906.....	579
Southern Surgical and Gynecological Association, 1905.....	306

	PAGE
Treat: International medical annual, 1906.....	124
Tuttle: Diseases of children.....	513
Walker: x-rays in general practice	307
Ware: Plaster of paris.....	512
Wells: Psychology	709
Whitman: Orthopedic surgery	570
Wilcox: Genitourinary and venereal diseases.....	122
Witthaus-Becker: Medical jurisprudence, vol. 1.....	367
Witthaus: Manual of chemistry	511
Wolff: Practical dermatology	441
Wood: Medical Record visiting list, 1907.....	302
Books Received 127, 180, 247, 311,	374, 441, 514, 580, 644, 709, 763
Boswell, Charles O., leukocytosis in surgical infections.....	523
Bowel, obstruction of.....	647
Brown, C. W. M., infantile scurvy	377
William M., version or high forceps, which and when?	529
Brush, Edward N., address to graduates	1
Buffalo Medical Journal, new offices of.....	427

CALOX, a preservative of the teeth	233
Cannaday, John E., iodine in surgical work	669
Carcinoma cutis	672
Carpets, Oriental, contagion from.....	359
Carroll, Lieutenant James, promotion of	505
Catgut, collargolised	482
Cerebral abscess, case of.....	389
Cesarean operation under difficulties	726
section performed by cow	419
Cholelithiasis, probilin treatment of	94
Chorea	282
Circulation, story of discovery of. 20	
Clinton, Marshall, local anesthetics in operations on chest and abdomen.....	131
obstruction of the bowel.....	647
Collargol in various affections.....	736
Collargolum in puerperal fever.....	224
in surgery	481

College and Hospital Notes :

PAGE

Buffalo Children's Hospital	433, 564
Buffalo General Hospital	176
Buffalo General Hospital Association	364
Buffalo General Hospital Training School for Nurses	761
Buffalo Homeopathic Hospital	300
Buffalo Woman's Hospital Training School for Nurses	176
Emergency Hospital Actors' Fair	702
Erie County Maternity Hospital	509
Erie County Tuberculosis Hospital	508
Fordham Hospital	702
Frontier Hospital, Buffalo	300
German Hospital, Buffalo	363
Jackson Health Resort	702
King Edward VII Sanatorium for consumptives	65
Lackawanna Steel Company's Dispensary	433
Marine Hospital, Buffalo	363, 432
McGill University	635
Nurses' Training School, W. C. A. Hospital, Jamestown	761
N. Y. Post-Graduate Medical School and Hospital	65, 433
N. Y. Skin and Cancer Hospital	300, 509
Riverside Accident Hospital Dispensary	433, 564
Syracuse University	702
Texas Sanitarium for Tuberculosis	635
University of Buffalo Medical Department	118, 509, 510, 703
United States Military Hospital	119
United States Military Hospital at the Presidio	240
Woman's Hospital, N.Y.	364
Colles's fracture, old	692
Conservatism in therapeutics	661

Correspondence :

Appendicitis in European centers—Eugene A. Smith	96
Blindness and legislation—F. Park Lewis	289
Drevet Manufacturing Company vs. Liquozone Company—Charles Marchand	495
Food preservatives and appendicitis—H. H. Langdon	226

PAGE

Interstate reciprocity in medical licensure—Samuel G. Dixon	290
Medical Department, University of Pennsylvania, raises requirements for admission—Charles H. Frazier	496
National department of health J. Pease Norton	291
Raybrook Hospital for Incipient Consumptives—M. P. Burnham	582
Requirements for admission to Yale medical school—Herbert E. Smith	353
Unnecessary operations on women—Arthur Dean Bevan	283
Unnecessary operations on women, a reply—Lewis S. McMurtry	285
Cures, promising impossible	621
Curettage: indications, technic and complications	542
Cystoscope, diagnostic value of	278
DEATH , sudden after labor	417
Deaver, John B., acute and chronic indigestion	213
Diabetes mellitus	461
"Dührssen Schnitt" in treatment of puerperal convulsions	142
EARACHE	338
Eastman, Thomas B., observations on 500 operations for appendicitis	146
Eclampsia, etiology of	420
Embryotomy on living infant	276
End of the season illness	201
Epiphyseal separation of ends of humerus	501
Erie county jail and penitentiary, inspection of by President Wickser	358
Expert evidence	683
evidence, medical	680
solution of medical	681
trials of medical	679
medical, discredited	681
medical testimony	684, 686
medical witness in court	682
witnesses and fees	683
Experts, non-partisan boards of	685
Eye strain and crime	144
FINGER NAIL , growth of	426
Foods and medicines, deceptive guarantee of	629
Fractures, treatment of	692

	PAGE		PAGE
Public Health and Marine Hospital Service examina- tions	516	Typhoid fever and filtration..	554
State civil service commission examinations	764	Unnecessary operations on women	293
Tri-state Chess Association..	248	University, a new.....	627
U. S. Civil Service examina- tions	645	University of Buffalo	752
Vital statistics, legislation for.	646	Water supply of Buffalo.....	422
J ACOBSON, NATHAN, gan- grene following contact with live wire	330	Leukocytosis in surgical infec- tions	523
Jameson, Thomas, obstruction in region of pylorus.....	465	Levy, I. H., achylia gastrica.....	655
Jenkins, J. F. T., treatment of dis- eases of respiratory tract	345	Lewis, Denslow, the social evil..	249
Johnson, William D., case of pan- creatic cyst.....	665	Library, new, college of Phys- icians, Philadelphia.....	360
K IDNEY, case of large pus.....	152	Life, warning against the stren- uous	233
King, James E., student ideals.	183	Literary Notes :	
Krauss, William C., need of a trained microscopist	716	Alexander, Practical history state of N. Y.....	129
L ABOR, injuries to child's head during	420	Annals of Otology, Rhinology and Laryngology	516
Labor, painless	416	Annals of Surgery	712
Leading Articles:		Annals of Surgery, July num- ber	764
American Association of Ob- stetricians and Gynecolo- gists 173	233	Blakiston's Son & Co., Dis- eases of children.....	68
Annual report of state cancer laboratory	424	Blakiston's Son & Co., Foods and their adulteration— Wiley	443
Army medical corps.....	229	British Gynecological Journal.	713
Association of Military Sur- geons	167	Brooklyn Medical Journal....	375
As to drinking water	628	Folia Therapeutica.....	712
Chicago conference on medi- cal education	693	Folia Urologica.....	581
Electric instrument shop....	231	Gazette Medical de Paris....	375
Farce comedy and expert evi- dence	499	Index Medicus	711
Fifty-seventh annual meeting of the A.M.A.	56	International Journal of Therapy	181
Gratwick research laboratory.	114	International Medical Review.	181
Health department problem..	425	Journal of Ophthalmology and Oto-Laryngology	712
Improved municipal sanita- tion	355	Knopf, Dr. S. A., prize mono- graph	713
Insurance lemons for phys- icians	502	Leonard's Illustrated Journal.	712
Interstate reciprocity in medi- cal licensure	111	Long Island Medical Journal.	374
Military surgeon, the.....	501	Mellin's Food Co., Diet after weaning	68
Osteopathic vertebra put into place	357	Mississippi Valley Medical As- sociation, prize essay.....	516
Prevention of unnecessary blindness	493	Oklahoma Medical News Journal	375
Summer beverages	696	Quarterly Journal of In- ebriety	130, 582
Tearing aside the veil.....	504	Saunders, W. B. & Co., An- nouncement of books.....	129
Thaw case, the.....	626	Saunders, W. B. Company, Illustrated catalogue.....	
		St. Louis Medical and Surgical Journal and Medical Mirror combined	314
		Therapeutic Gazette, Medical Age and Medicine consoli- dated	314

	PAGE
Logic of the situation.....	455
Low, Charles E., physician-civilian.....	723
Frank W., prevention of tooth decay	388
Lucid, M. M., epiphyseal separation of ends of humerus.....	501
Lunatic, a responsible.....	622

M cKee E. S., treatment of sciatica	733
McKelway, St. Clair, chancellor's address	279
McMurtry, L. S., surgical and serum treatment of puerperal sepsis	473
Macpherson, J. D., nature, the good physician	462
Malpractice suit ended	621
Medical bill, new	697
inspection of schools.....	505
Mirror discontinued.....	630
officer of state forces, training of	191
Melena neonatrum	155
Microscopist, need of trained	716
Miller, John, curettage: indica- tions, technic and complications.....	542

Miscellany :

Association of Military Sur- geons, U.S.	130
Buffalo Health Department circulars	182
Morse International Agency, New York and London	68
Public Health and Marine Hospital Service examina- tions	68
State Civil Service examina- tions	130, 314, 444, 713
Morris, Robert T., heteroplastic ovarian grafting	393
Morse, John Lovett, diseases of nasopharynx in infancy	598

N ASOPHARYNX, diseases of in infancy.....	598
Nasopharynx, treatment of chron- ic infections of.....	80
Nature, beautiful law of.....	426
the good physician.....	462
Nervous diseases, etiology of functional	71
Nobel prize, awards of.....	360
Nurse, the French trained.....	232

OBITUARY:

Baethig, Henry.....	6°
---------------------	----

	PAGE
Bergmann, v. Ernst.....	557
Bidaman, Weston D.....	506
Bontecou, Reed Brockway.....	632
Buhl, Theodore H.....	631
Calabrese, Bernardino.....	117
Carpenter, H. W	700
Campbell, William R 630.....	757
Colegrove, Clinton.....	297
Cornwell, L. W.....	298
Dunn, Andrew Thomas.....	700
Fowler, George Bingham.....	507
Garcelon, Alonzo.....	362
Henrotin, Fernand	362
Horton, David B.....	62
Howell, Joseph L.....	62
Kellogg, Charles M.....	700
Krug, J. F.....	428
Lapponi, Guiseppe.....	362
LaWall, Elbert W.....	559
MacDonald, Alexander E.....	362
McCaw, James B.....	117
Meisburger, William C. L.....	361
Myers, William H.....	507
Osiris, Daniel.....	507
Otis, William K.....	239
Packwood, William Jasper.....	239
Peltier, Pierre Desnoyers.....	117
Potter, Emily Bostwick.....	294
Robbins, Alfred H.....	362
Rodman, Harry Heath.....	298
Tompkins, Orrin A.	760
Thomas, William B.....	559
Wiggins, John H.....	632
Woolsey, Elliott H.....	429
Wyeth, John	700

Occipito-posterior positions, new management of	421
Operation, consent to.....	620
Otis, William Kelly, in memoriam.....	358
Otitis media, acute	344
aspiration in acute.....	624
Otorrhea, how to manage.....	547
Ovarian grafting, heteroplastic.....	393
Ovariectomy, double	417
Oxidation, systemic promotion of.....	110

P ANCREATIC CYST, case of.....	665
Park, Roswell, story of dis- covery of circulation.....	20
Patrick case, the.....	623

Personal :

Bowerman, Edward A.; Grif- fith, A. C.; Armour, Watson; Wilson, Nelson W.; Pohl- man, Julius.....	62
Brown, John Young; Haase, Charles; Nottingham, Wil- liam; Walker, J. E.; Park, R.506	

	PAGE	
Chalmers, John; MacLeod, James A.; Twohey, John J.; Follonsbee, F.; Watson, William H.; Senn, Nicholas; House, William; Dudley, E. C.	699	
Doty, Alvah H.; Fairbairn, John Fitzgerald; Keen, W. W.	427	
Evans, William A.; Ellis, Charles A.; Cooke, Almon H.; McKee, E. S.	630	
Foster, Carlton; Danser, Earl G.; Wells, Brooks H.; Potter, Irving W.; Ely, C. S.; O'Brien, John D.; Venezia, Professor di.	361	
Hess, L. T.; Marchiavafa, Et-tore; Brown, John Young; Carpenter, Archibald D.; Goldberg, S.; Clements, Charles A.; Stockton, Charles G.	428	
House, William.	175	
Howard, Charles F.; O'Donnell, W. J.; Pohlman, Augustus Grote.	757	
Lewis, James H.; Wende, Ernest; Fronczak, Francis E.; Goldberg, Jacob; Gaertner, William; Card, D. P.	297	
McKelway, St. Clair.	115	
McMurtry, L. S.; Pryor, John H.; Bremerman, L. W.; Meinesbach, R. O.	296	
McMurtry, L. S.; Reed, Charles A. L.; Hanley, L. G.; Lewis, F. Park; Ferguson, A. H.; Wilson, Nelson W.; Wende, Ernest.	174	
Pillsbury, C. W.; Sharp, H. P.; Smith, Eugene A.; Lewis, F. Park; Wende, H. S.; Williams, Herbert U.; Schwarz, Henry; Dorsett, Walter B.; Torrey, Edward; Foster, William S.	116	
Putnam, James Wright; Bender, Ida C.; Walker, Edwin; Dorsett, Walter Blackburn; Bourne, C. W.; Bryant, Joseph Decatur; Bainbridge, William Seaman.	756	
Smith, Eugene A.; Card, N. P.	360	
Thompson, J. Ford.	295	
Townsend, Wisner R.; Fitch, W. E.; Park, Roswell; O'Reilly, Robert M.; Gaylord, H. R.; Straub, Paul F.	238	
Vander Veer, Albert; Grove, Benjamin H.; Grant, H. Y.	699	
White, J. H.; Bowman, Carlos E.; Dike, I. A. M.; Kener-son, Vertner; LeBreton, Prescott.	557	
Woodbury, John McGaw.	237	
Phosphorus, organic, in nervous diseases.	549	
Phthisis night sweats, treatment of.	736	
Physician-civilian.	723	
Physicians' services, various values of.	622	
Pilcher, James Evelyn, training of medical officer of state forces.	191	
Porter, Miles F., concernig amputations.	730	
Pozzi "Live d'Or".	294	
Pregnancy after operation for gonorrheal salpingitis.	274	
cornual.	274	
death during.	416	
diagnosis of early.	617	
Privileged communication, waiver of by heir.	619	
Progress in Medical Science :		
Orthopedic Surgery, by Prescott LeBreton.	91	
Pediatrics, by Maud J. Frye.	154	
Obstetrics and Gynecology, by E. S. McKee.	274, 416	
Forensic Medicine, by E. S. McKee.	618, 679	
Prostatic hypertrophy treatment.	87	
Pruritus ani.	354	
Puerperal fever, intravenous injections of collargolum in.	224	
sepsis, surgical and serum treatment of.	473	
Putnam, James Wright, etiology of functional nervous diseases.	71	
Pyrenol, influenza treated with.	737	
in influenza.	623	
therapeutics of.	95	
Pylorus, obstruction in region of.	465	
QUACKERY, bill to stop.	621	
RAILWAY STATION, Buffalo's a disgrace.		555
Rogers, Dr. Howard J., letter relating to reciprocity in medical licensure.	163	
Regents' academic examinations.	281	
Reciprocity in medical licensure.	315, 482	
Reminiscences, some professional.	533	
Report of state commissioner of health.	505	

	PAGE
Respiratory tract, diseases of.....	345
Rooker, A. M., fracture of skull..	403
Roosa, D. B. St. John, monocular hysterical amblyopia	673
Roosevelt, President inspects the canal zone	349
Rose-Cook, cerebral abscess	389

S ANDER (Enno) prize essay, 1906	191
San Francisco physicians, needs of	61
Sciatica, treatment of	733
Scurvy, infantile	377
Sewage, danger of	555
Serum, therapeutics of artificial... antitetanic for lockjaw.....	161 348
Shoemaker, John V., carcinoma cutis	672
Shrady, George F., some profes- sional reminiscences.....	533
Shurly, B. R., anemia and incipient tuberculosis, treatment by hypo- dermic medication.....	537
Silver therapy	277
Skull, fracture of with complica- tions	403
Smith, Eugene A., surgical aspect of gastric ulcer.....	445
Social evil	249

Society Meetings :

Allegany Society of Buffalo..	432
American Academy of Medi- cine	635
American Association of Ob- stetricians and Gynecolo- gists	63, 761
American Climatological As- sociation	635
American Congress of Phy- sicians and Surgeons.....	563
American Medical Association	563, 700
American Medical Editors' Association	634
American Roentgen Ray Society	65
Association of American Med- ical Colleges	634
Association of Military Sur- geons, U. S.....	117
Buffalo Academy of Medicine 64, 175, 239, 299, 363, 431,	508, 562, 634, 701, 760
British Medical Association	64, 118
Buffalo Nurses' Association..	559
Eleventh Antialcoholic Con- gress	761
Esculapian Club	432

	PAGE
Harvard Medical Society of New York.....	432
Homeopathic Medical Society State of New York.....	239
International Homeopathic Congress	118
Lake Keuka Medical Associa- tion	65
Lehigh Valley Railway Sur- geons Association.....	299
Medical Association of Cen- tral New York.....	175
Medical Society County of Erie	176, 364, 634, 760
Medical Society County of Niagara	65, 298
Medical Society County of Steuben	701
Medical Society County of Wyoming	300
Medical Society State of New York	298, 363, 429
Medical Society State of N. Y., eighth district branch...	118
Medical Union of Buffalo...	118
Mississippi Valley Medical Association	118, 299
National Association of U. S. Pension Examining Sur- geons	563
National Confederation State Medical Examining and Licensing Boards	635
Niagara Falls Academy of Medicine	701
Philippine Islands Medical Association	563
Rochester Academy of Medi- cine	700
Roswell Park Medical Club..	239
Sanitary Officers of the State of N. Y.....	175
Sixth International Derma- tological Congress	563, 761
Society of Clinical Surgery...	632
Southern Surgical and Gynec- ological Association ..	298, 363
Western N. Y. Homeopathic Medical Society.....	634
Women's Medical Society State of N. Y.....	562

Society Proceedings :

Medical Association of Central New York	739
Medical Society County of Erie	52, 404, 561, 675
Soothing syrups, successful.....	619
Spelling, simplified, and the medi- cal profession.....	326

	PAGE		PAGE
Spitting on sidewalks, ordinance against	556	Medical licensure, various views in	482
Spleen, puerperal strangulation of.....	418	Quack doctors, safeguards to protect people from.....	98
State Board of Medical Examiners	755	Reciprocity in medical licensure	162, 483
Stover, Charles, relation of tuberculosis to municipal and industrial life.....	583	The Isthmian canal.....	349
Stoves, pipeless	556	What to eat	688
Streets, use of as playgrounds			
Student ideals	183	UROTROPIN and helmitol....	278
prohibited	359		
Surgical instruments	402	VANDER VEER, Albert, reciprocity in medical licensure..	315
TEXAS board of medical examiners	697	Version or high forceps.....	529
Thoma, Fridolin, leading men and events in history of American medicine	40	Visions of Mary Czajka.....	470
Tonsil, acute infections of pharyngeal	158	Vital statistics, state file of.....	505
Toronto university confers degrees	295	Vulva, pilocarpine in pruritus of..	692
Totman, D. M., expert medical testimony	321		
Tooth decay, prevention of.....	388	WALLACE, W. L., intestinal resection and anastomosis, rapid and safe method.....	517
Tuberculosis, dust as a cause of...497		Walsh, John J., in memoriam....	54
relation of to municipal and industrial life	583	Warbrick, John C., treatment of chronic infections of nasopharynx	80
management of pulmonary	135	Water, pure drinking.....	359
		Whooping cough, leukocytosis in..	154
		Why not? A plea.....	335
		Wilder, Burt G., medical profession and simplified spelling....	326
		Witness, suggestions to medical..	685
		Woodbury, Frank Thomas, Cesarean operation under difficulties..	726
		Wounds, dressing of.....	421
		Wright, Adam H., accidental obstetric hemorrhage.....	257
		YOUNG, J. C., management of pulmonary tuberculosis	135

Topic of Public Interest:

Blindness, prevention of unnecessary	491, 493
Delegates, House of and Medical Society County of Erie.....	489
Free university, a.....	279

